To: DeCair, Sara[DeCair.Sara@epa.gov]
Cc: Hunt, Brian[bhunt@sandia.gov]
From: Kraus, Terrence D
Sent: Tue 1/5/2016 7:30:51 PM
Subject: FW: [EXTERNAL] RE: EO 12866 Review: EPA Drinking Water PAG (RIN 2060-ZA19)

Hi Sara,

I received the email below from Vlad Dorjets.

Please let Brian and I know if we can help you in any way for this briefing.

Thank you.

Terry Kraus, CHP

Nuclear Incident Response Programs

Sandia National Laboratories

(505) 284-9708

From: Dorjets, Vlad [mailto:Vladik_Dorjets@omb.eop.gov]
Sent: Monday, January 04, 2016 1:57 PM
To: Reg Review (USDA); 'Reg Review (DOE)'; Reg Review (DOT); Reg Review (DHS) (DHSOGCRegulations@hq.dhs.gov); Asha Mathews (DOC); 'TChoe@doc.gov'; Ed Miller; 'Nehm, Lindsay R CIV USN DCNO N4 (US)'; 'HHS'; Mark Lawyer (DOI); Apgar, Megan; Bob Hinchman (DOJ); Eric Gormsen (DOJ); 'Heidi Cohen (Treasury)'; 'Kia Dennis (SBA)'; 'Portis, Benjamin C'; 'Scroggins, Sharon T. (MSFC-AS10)'; 'BenbowA@state.gov'; 'kottmyeram@state.gov'; 'nanette.jennings@nasa.gov'; 'Martin.Conrey@sba.gov'; 'Donnell, Tremaine'; 'Andoh, Roger'; 'franks.kathleen@dol.gov'; 'chip.smith1@us.army.mil'; LongLJ@state.gov
Cc: Schwab, Margo; 'edward.regnier@eh.doe.gov'; Kraus, Terrence D; 'lee.a.nickel1@navy.mil'; 'ricardo.a.reyes@us.army.mil'; 'asa4@cdc.gov'; 'man@cdrh.fda.gov'; 'william.cunningham@nist.gov'; 'Lodwick.Jeff@dol.gov'; 'patricia.milligan@nrc.gov'; 'John.Jensen@dm.usda.gov'; 'John.Mackinney@dhs.gov'; 'Michael.Howe@fema.dhs.gov'; 'paul.ward@fema.dhs.gov'
Subject: [EXTERNAL] RE: EO 12866 Review: EPA Drinking Water PAG (RIN 2060-ZA19)

Colleagues,

OMB believes that it could be helpful for EPA to provide a briefing to interagency reviewers on its proposed intermediate drinking water PAGs with a particular focus on the comments it received in response to the 2013 draft update and why it made the decisions that it did in the current PAG. Please let me know by **COB Wednesday** if you, and of your colleagues or, to the extent that this message has been sent to a centralized mailbox, somebody else from your Agency would be interested in participating in such a briefing. I will then contact people directly about logistics.

Vlad

Vlad Dorjets

Natural Resources and Environment Branch

Office of Information and Regulatory Affairs

White House Office of Management and Budget

(202) 395-7315 | vdorjets@omb.eop.gov

From: Dorjets, Vlad
Sent: Friday, December 11, 2015 1:07 PM
To: Reg Review (USDA) <usdareg@obpa.usda.gov>; 'Reg Review (DOE)' <GC-33EnergyRegs@hq.doe.gov>; Reg Review (DOT) <DOT.REGULATIONS@dot.gov>; Reg Review (DHS) (DHSOGCRegulations@hq.dhs.gov) <DHSOGCRegulations@hq.dhs.gov>; Asha Mathews (DOC) <amathew@doc.gov>; TChoe@doc.gov; Ed Miller <edmund.d.miller.civ@mail.mil>; 'Nehm, Lindsay R CIV USN DCNO N4 (US)' <lindsay.nehm@navy.mil>; HHS <HHSExecSec@hhs.gov>; Mark Lawyer (DOI) <mark_lawyer@ios.doi.gov>; Apgar, Megan <megan_apgar@ios.doi.gov>; Bob Hinchman (DOJ) <Robert.Hinchman@usdoj.gov>; Eric Gormsen (DOJ) <Eric.T.Gormsen@usdoj.gov>;

'Heidi Cohen (Treasury)' <Heidi.Cohen@treasury.gov>; 'Kia Dennis (SBA)' <Kia.Dennis@sba.gov>; 'Portis, Benjamin C' <bcportis@tva.gov>; 'Scroggins, Sharon T. (MSFC-AS10)' <sharon.scroggins@nasa.gov>; BenbowA@state.gov; kottmyeram@state.gov; nanette.jennings@nasa.gov; Martin.Conrey@sba.gov; Donnell, Tremaine <Tremaine.Donnell@nrc.gov>; Andoh, Roger <Roger.Andoh@nrc.gov>; franks.kathleen@dol.gov; 'chip.smith1@us.army.mil' <chip.smith1@us.army.mil>
Cc: Schwab, Margo <Margo_Schwab@omb.eop.gov>
Subject: EO 12866 Review: EPA Drinking Water PAG (RIN 2060-ZA19)

Colleagues,

Attached for your review please find EPA's proposed intermediate drinking water protective action guideline (PAG) together with a draft of the Federal Register Notice that would announce the public comment period for the proposal. Recall that in 2013 OMB circulated for review, and EPA eventually published, a request for public comment on a revision to the 1992 PAG manual. The update included, among other things, dose calculations based on current science. The following URL summarizes the changes proposed http://www.epa.gov/sites/production/files/2014-11/documents/pagfactsheet.pdf.

The 2013 revision EPA published for public comment *did not propose a specific drinking water PAG*, although the Agency explicitly recognized that a short-term emergency drinking water guide may be useful for public health protection during a large-scale incident, as demonstrated by the Fukushima nuclear power plant accident. EPA asked for public comments on this subject.

The current document being circulated for review under E.O. 12866 and 13563 contains a specific proposal for the intermediate water PAG, which is designed to be responsive to public comments received in 2013. Given that some agencies had significant concerns with EPA's original *unpublished* proposal, we urge you to share this document with the subject matter experts from your department/agency who weighed in last time. In addition, we have attached the names and email addresses of the members of the PAG Federal interagency subcommittee chartered by the Federal Radiological Preparedness Coordinating Committee led by FEMA.

With respect to the 2013 request for public comments, you can view Federal Register notices and public comments in EPA's official docket on regulations.gov (EPA-HQ-OAR-2007-0268). EPA

is currently assessing public comments received. After receiving public comments on the proposed intermediate water PAG, EPA plans to issue a final PAG Manual in the Fall of 2016.

Please provide your comments to me by **COB Wednesday, January 13th** and please copy Margo Schwab (mschwab@omb.eop.gov).

As always, the attached materials are deliberative and pre-decisional and may not be shared or discussed with anyone outside of the Executive Branch. Feel free to share within your agency or department as appropriate. If you feel someone outside of your department should participate in this review, please let me know and I will forward to them. Please help us maintain the integrity of the interagency review process by respecting these process requirements.

Vlad

Vlad Dorjets

Natural Resources and Environment Branch

Office of Information and Regulatory Affairs

White House Office of Management and Budget

(202) 395-7315 | vdorjets@omb.eop.gov

To: DeCair, Sara[DeCair.Sara@epa.gov]
From: Jensen, JohnT - DM
Sent: Mon 1/4/2016 10:21:38 PM
Subject: Re: EO 12866 Review: EPA Drinking Water PAG (RIN 2060-ZA19)

I just realized I was thinking back to your excellent briefing on the revised PAG not the water PAG. Looking forward to It.

John T. Jensen, Chief

Radiation Safety Division

Office of Homeland Security and Emergency Coordination

US Department of Agriculture

5601 Sunnyside Avenue, MS 5510

Beltsville, MD 20705

301-504-2441 (o)

202-657-9043 (m)

After hours radiological emergencies: contact the

USDA Operations Center 202-720-5711

RSD web page: www.dm.usda.gov/ohsec/rsd/

On Jan 4, 2016, at 4:14 PM, DeCair, Sara <DeCair.Sara@epa.gov> wrote:

> Oh, but it will be fun! I'm glad to get a heads up on this to prepare with my Office of Water colleagues. I didn't spend that much time with A Team on the public comments we got, but will add that to past briefing materials we've used internally. I can only assume this will be requested with very short prep time since your comments are due back on 1/13!
>
> S.

From: Jensen, JohnT - DM <John.Jensen@dm.usda.gov>
Sent: Monday, January 4, 2016 4:01 PM
To: DeCair, Sara
Subject: RE: EO 12866 Review: EPA Drinking Water PAG (RIN 2060-ZA19)

I believe you provided A team members with this briefing. If you agree, maybe we can take credit for attending your briefing or do you need us to attend this briefing. Not trying to get out of the briefing but maybe you don't need us all to come. Just a thought.

John T. Jensen, Chief

Radiation Safety Division

Office of Homeland Security and Emergency Coordination

US Department of Agriculture

5601 Sunnyside Avenue, MS 5510

Beltsville, MD 20705

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From: Dorjets, Vlad [mailto:Vladik_Dorjets@omb.eop.gov]
Sent: Monday, January 04, 2016 3:57 PM
To: WCTS - OBPA USDA Reg; 'Reg Review (DOE)'; Reg Review (DOT); Reg Review (DHS) (DHSOGCRegulations@hq.dhs.gov); Asha Mathews (DOC); 'TChoe@doc.gov'; Ed Miller; 'Nehm, Lindsay R CIV USN DCNO N4 (US)'; 'HHS'; Mark Lawyer (DOI); Apgar, Megan; Bob Hinchman (DOJ); Eric Gormsen (DOJ); 'Heidi Cohen (Treasury)'; 'Kia Dennis (SBA)'; 'Portis, Benjamin C'; 'Scroggins, Sharon T. (MSFC-AS10)'; 'BenbowA@state.gov'; 'kottmyeram@state.gov'; 'nanette.jennings@nasa.gov'; 'Martin.Conrey@sba.gov'; 'Donnell, Tremaine'; 'Andoh, Roger'; 'franks.kathleen@dol.gov'; 'chip.smith1@us.army.mil'; LongLJ@state.gov
Cc: Schwab, Margo; 'edward.regnier@eh.doe.gov'; 'tdkraus@sandia.gov'; 'lee.a.nickel1@navy.mil'; 'ricardo.a.reyes@us.army.mil'; 'asa4@cdc.gov'; 'man@cdrh.fda.gov';

'william.cunningham@nist.gov'; 'Lodwick.Jeff@dol.gov'; 'patricia.milligan@nrc.gov'; Jensen, JohnT - DM; 'John.Mackinney@dhs.gov'; 'Michael.Howe@fema.dhs.gov'; 'paul.ward@fema.dhs.gov'
Subject: RE: EO 12866 Review: EPA Drinking Water PAG (RIN 2060-ZA19)

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Vlad

Vlad Dorjets

Natural Resources and Environment Branch

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(202) 395-7315 | vdorjets@omb.eop.gov

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Sent: Friday, December 11, 2015 1:07 PM
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'Kia Dennis (SBA)' <Kia.Dennis@sba.gov>; 'Portis, Benjamin C' <bcportis@tva.gov>; 'Scroggins, Sharon T. (MSFC-AS10)' <sharon.scroggins@nasa.gov>; BenbowA@state.gov; kottmyeram@state.gov; nanette.jennings@nasa.gov; Martin.Conrey@sba.gov; Donnell, Tremaine <Tremaine.Donnell@nrc.gov>; Andoh, Roger <Roger.Andoh@nrc.gov>; franks.kathleen@dol.gov; 'chip.smith1@us.army.mil' <chip.smith1@us.army.mil>
Cc: Schwab, Margo <Margo_Schwab@omb.eop.gov>
Subject: EO 12866 Review: EPA Drinking Water PAG (RIN 2060-ZA19)

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Please provide your comments to me by **COB Wednesday, January 13th** and please copy Margo Schwab (mschwab@omb.eop.gov).

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Vlad

Vlad Dorjets

Natural Resources and Environment Branch

Office of Information and Regulatory Affairs

White House Office of Management and Budget

(202) 395-7315 | vdorjets@omb.eop.gov

To: DeCair, Sara[DeCair.Sara@epa.gov]; Nesky, Anthony[Nesky.Tony@epa.gov]
From: Wieder, Jessica
Sent: Tue 12/29/2015 6:11:27 PM
Subject: RE: Review of Becker PAGs Comms Material

Thanks, Sara.

I did a thorough review of the questions on pages 94-123. I would like to discuss ways to make this a bit more generic, instead of just dirty bomb focused.

Both Alan and Rick liked the idea of making the Q&A and the Protective Action Area Map Templates into PAG Manuel implementation tools. I am talking with Lindsey about the types of QA we might need on these projects and how to capture the QA already performed.

We have a meeting in two weeks. I will have more information at the time.

Happy New Years!

Jess

Jessica Wieder
U.S. EPA
Radiation Protection Program
Center for Radiation Information and Outreach
w: 202-343-9201
c: 202-420-9353

From: DeCair, Sara
Sent: Tuesday, December 29, 2015 12:32 PM
To: Wieder, Jessica; Nesky, Anthony
Subject: Review of Becker PAGs Comms Material

Fun to review this long document while the office is so quiet!

I thought it odd that on p. 32 in references, they cite the 2006 OSC Rad Response Guidelines but the only EPA document I thought was mentioned in my reading of the opening was the PAG Manual and the 2007 Crisis Comms Guide...

They mention how most PAGs material is focused on the response community, not the public. Sure enough, the FAQs I've attached were questions we got during outreach presentations and are geared toward users of the PAG Manual, not the public.

One typo in the slide set is on p. 77, where it says "go graze" and it should be "to graze..." in case we decide to post the slides on our web page. When we get together next on this topic, we can decide what things to post from the document. It is very good stuff!

Cheers, and happy new year!

Sara

To: DeCair, Sara[DeCair.Sara@epa.gov]; Hernandez-Quinones, Samuel[Hernandez.Samuel@epa.gov]
Cc: Hunt, Brian[bhunt@sandia.gov]; Kraus, Terrence D[tdkraus@sandia.gov]
From: Kraus, Terrence D
Sent: Fri 12/18/2015 7:30:45 PM
Subject: RE: [EXTERNAL] Fwd: Drinking water PAGs

Sara,

Regarding Chemical Toxicity

Comparing the chemical toxicity with the radiotoxicity is a good point because for some chemical forms the chemical toxicity can be a greater hazard than the radiotoxicity.

I believe this is the case with depleted uranium which has such a long half-life that you can ingest quite a bit of it before exceeding a dose limit. At the activity levels that exceed the dose limit you will exceed safe limits for renal toxicity concerns.

An added difficulty with considering the chemical toxicity is that it can vary significantly with the chemical form. Therefore, it would difficult to perform a comprehensive comparison of chemical toxicity and radiotoxicity unless a chemical form is specified. We would have to get an Industrial Hygienist-type person involved to look at the chemical toxicity. I'm sure EPA has this skill set on the payroll.

Regarding Need to Consider Organ Dose

Brian Hunt and I agree that it would be prudent to look at the committed equivalent dose to organs to very that an organ dose is not more limiting that the committed effective dose. When we discussed this a year or so ago, I think EPA's position was that they wanted to keep the development of water PAGs simple to avoid confusing the public. Considering both the committed effective dose and committed equivalent dose would make the EPA's recommendations more consistent with how FDA manages food. Of course this would require PAGs based on committed dose equivalents, but you could just follow FDA's method of setting theses PAGs one order of magnitude greater than the committed effective dose PAGs.

It really wouldn't be that difficult to consider both the committed effective dose PAG and the committed equivalent dose PAG if you have an automated assessment tool like Turbo FRMAC. All we would have to do is identify and use the most restrictive age group and organ to set the

water PAG.

Regarding FGR 13 vs. FGR 11

FGR 13 provide risk estimates, not dose coefficients. Of course, the risk estimates are based upon a dose coefficient so the dose to the organ of interest can be calculated.

Because FRG 13 considers the various age groups it can NOT be based on FGR 11 which is based on ICRP 30 and only gives DCs for the adult (worker).

The language in FGR 13 is a bit unclear, but I believe it uses the ICRP 72 DCs that considers all age groups and genders (as appropriate) to come up with a gender- and age weighted risk factor.

Therefore, if you want to tie the FGR 13 risk estimators to a set of DCs, I believe ICRP 72 is appropriate for the intake (inhalation, ingestion) risk estimators, and the external DCs in FGR 12 are used to derive the risk estimators for external exposures.

Please see the screenshots below for more information.

Thank you.

Terry Kraus, CHP

Nuclear Incident Response Programs

Sandia National Laboratories

(505) 284-9708

Documents in EPA's Federal Guidance Report series provide reference values for assessing both radiation dose and risk from exposure to radionuclides. Federal Guidance Report Nos. 11 and 12, which address radiation dose, are intended for use in determining conformance with the radiation protection guidance to Federal agencies issued by the President. The present report does not replace either of those documents or affect their use for radiation protection purposes, even though many of the biokinetic and dosimetric models used here are updates of models used in Federal Guidance Report No. 11. The dose coefficients in Federal Guidance Report Nos. 11 and 12 continue to be recommended for determinations of compliance with dose-based regulations and, where applicable, for use in dose assessments. Those reports will be updated in the future as warranted. Federal Guidance Report 13 has a different purpose — it is intended for use in assessing risks from radionuclide exposure, in a variety of applications ranging from analyses of specific sites to the general analyses that support a rule making. Although its use, especially by Federal agencies, is encouraged to promote consistency in risk assessment, such use is, of course, discretionary.

5. Average lifetime cancer risk per unit activity intake

Because a risk coefficient is an expression of the radiogenic cancer risk *per unit activity intake*, the calculated lifetime cancer risk from chronic intake of the environmental medium must be divided by the expected lifetime intake. The expected lifetime intake is given by the integral over age of the product of the usage rate and the survival function.

Therefore, in the calculation of a gender- and cancer site-specific risk coefficient, usage of the environmental medium appears both in the numerator (see Step 4) and the denominator. This makes the risk coefficient independent of the concentration of the radionuclide in the medium and of the population-averaged usage rate of the medium but does not diminish the importance of the usage rate in the derivation of a risk coefficient. For example, the risk coefficient for a given radionuclide in food may differ considerably from the coefficient for the same radionuclide in tap water because the assumed age-specific patterns of consumption are substantially different for food and tap water.

Except for the calculations of the time-dependent organ activities and absorbed dose rates, each of the steps described above is performed separately for each gender and each cancer site. A total risk coefficient is derived by first adding the risk estimates for the different cancer sites in each gender and then calculating a weighted mean of the coefficients for males and females. The weighted mean of coefficients for males and females involves the presumed gender ratio at birth, the gender-specific risk per unit intake at each age, and the gender-specific survival function at each age.

Computation of the risk coefficients for external exposure

The computation of risk coefficients for external exposure scenarios is similar to that for internal exposure scenarios but involves fewer steps because the absorbed dose rates are taken

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Cancer mortality risk for ingestion of ^{232}Th in food and for inhalation of a moderately soluble form (Type M) of ^{232}Th of particle size 1 µm (AMAD), as derived by the methods of this report, are compared in Table C.5 with estimates derived from the effective dose, *E* (that is, as $E \times 0.05$ Sv^{-1}). Two different estimates of effective dose are considered, one derived using the committed effective dose coefficient from Federal Guidance Report No. 11 (1988) and the other derived using the effective dose coefficient from ICRP Publication 72 (1996). (ICRP Publication 72 is a summary of the tabulations of the ICRP's series of documents on age-dependent doses to members of the public from intake of radionuclides.) Both estimates are based on an intake of 1 Bq. The two estimates are abbreviated as $0.05\ Sv^{-1} \times E(FGR11)$ and $0.05\ Sv^{-1} \times E(ICRP72)$, respectively. For simplicity, *E(ICRP72)* is taken to be the effective dose for intake by the adult.

For the case of ingestion of ^{232}Th in food, $0.05\ Sv^{-1} \times E(FGR11)$ is about three-fold higher than $0.05\ Sv^{-1} \times E(ICRP72)$, and 15-fold higher than the risk based on the coefficient derived here (Table C.5). The discrepancies between $0.05\ Sv^{-1} \times E(FGR11)$ and $0.05\ Sv^{-1} \times E(ICRP72)$ result in part from differences in the new and previous biokinetic models for thorium (discussed earlier), and in part from recent changes in the ICRP's tissue weighting factors (ICRP, 1991). The discrepancies between $0.05\ Sv^{-1} \times E(ICRP72)$ and the risk coefficient are the net result of a variety of factors, including the limitations of the effective dose as a measure of risk for non-uniformly distributed radionuclides such as ^{232}Th and its radioactive progeny, differences between the high-LET RBEs for leukemia and breast cancer used in the present methodology and those used by the ICRP, and the failure of the effective dose to account adequately for competing risks when the organ doses are received over several decades.

Although there is expected to be some age dependence in organ dose rates from external exposures, comprehensive tabulations of age-specific external doses are not yet available. Therefore, the tabulations for the reference adult in Federal Guidance Report No. 12 are applied to all age groups. As discussed later, the application of these external dose coefficients to other age groups appears to result in relatively small errors (usually <30%) in most cases. In extreme cases, such as for external irradiation of deep organs (e.g., ovaries or colon) of infants at energies less than 100 keV energies, 2- to 3-fold errors may arise. In applications of the derived risk coefficients, however, errors arising from application of age-independent external dose rates are likely to be negligible compared with errors associated with the simplified exposure scenarios used here (e.g., constant placement and position, no shielding, and infinite or semi-infinite source regions). Simplified exposure scenarios are used here because it is not feasible to develop an external dosimetric methodology that applies to arbitrary distributions of contamination or to differences in life styles.

Interpretation of dose coefficients from Federal Guidance Report No. 12

Dose coefficients for external exposure relate the dose to organs and tissues of the body to the concentration of radionuclides in environmental media. The term "external exposure" is used to indicate that the radiations originate outside the body. The radiations of concern are those that

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Table C.5. Comparison of cancer mortality risk coefficients with risk estimates based on effective dose, for ingestion (food) or inhalation of ^{232}Th (Type M, 1 µm AMAD).

Method	Ingestion of ^{232}Th		Inhalation of ^{232}Th, Type M, 1 µm	
	Cancer mortality risk (Bq^{-1})	Multiple of value derived in this report	Cancer mortality risk (Bq^{-1})	Multiple of value derived in this report
0.05 Sv^{-1} × *E(FGR11)*[a]	3.69E-08	15	2.22E-05	43
0.05 Sv^{-1} × *E(ICRP72)*[b]	1.15E-08	4.7	2.25E-06	4.3
This report	2.45E-09	–	5.18E-07	–

[a] *E(FGR11)* is the effective dose given in Federal Guidance Report No. 11 (1988), which is based on models and methods of ICRP Publication 30 (1979).

[b] *E(ICRP72)* is the effective dose for intake by the adult, based on models and methods of the ICRP's recent series of documents on age-dependent dosimetry (ICRP 1989, 1993, 1995a, 1995b, 1996). Use of intake-weighted average of age-dependent effective doses typically yields <30% difference from indicated values for commonly used age-specific intake scenarios.

The discrepancies in the three methods of estimation of fatal cancers are even greater for the case of inhalation of moderately soluble ^{232}Th, for which 0.05 Sv^{-1} × *E(FGR11)* is 10-fold higher than 0.05 Sv^{-1} × *E(ICRP72)* and 40-fold higher than the risk coefficient. The reasons for these discrepancies are essentially the same as those described above for the ingestion case. The main reason that relative differences between 0.05 Sv^{-1} × *E(FGR11)* and the other two estimates are smaller in the ingestion case than in the inhalation case is that the new, higher f_1 values for thorium offset part of the reduction in the estimate of effective dose for ingestion of ^{232}Th implied by other recent changes in the biokinetic models and tissue weighting factors. By contrast with model revisions concerning the level of absorption of ingested thorium, the new respiratory tract model predicts slightly lower absorption of inhaled material to blood than does the previous respiratory tract model.

From: DeCair, Sara [mailto:DeCair.Sara@epa.gov]
Sent: Friday, December 18, 2015 8:12 AM
To: Hernandez-Quinones, Samuel; Kraus, Terrence D
Subject: [EXTERNAL] Fwd: Drinking water PAGs

Andy asks good questions and I hope I have a good answer! Do either of you know about uranium Chem toxicity? I'm not well versed in it and I'm off today, pretty busy.

Thx!

Sent from my iPhone

Begin forwarded message:

> **From:** "DeCair, Sara" <DeCair.Sara@epa.gov>
> **Date:** December 18, 2015 at 10:11:04 AM EST
> **To:** "Scott, Andrew" <andrew.scott@hq.dhs.gov>
> **Subject: Re: Drinking water PAGs**
>
> Ex. 6 - Personal Privacy We're going to have Frmac do the calcs for the rest of the nuclides once we get public comments. I think the conservatism we build in by choosing the lowest concentration by checking all age groups does the trick for covering those organ dose drivers. Frmac says doing six calcs and picking the lowest drl is doable with their software. Check out the fgr 13 cd supplement, it is indeed where we got our DCFs.
>
> For uranium I'm pretty sure we're low enough that the Chem toxicity isn't a problem but I'm not sure. I will check in with my colleagues to see if they considered that or not. Thanks for checking with me, and glad to hear it went out!! Exciting.
>
> Sara
>
> Sent from my iPhone
>
> On Dec 18, 2015, at 9:52 AM, Scott, Andrew <andrew.scott@hq.dhs.gov> wrote:
>
> > Sara,

Ex. 6 - Personal Privacy

MAJ Jama VanHorne-Sealy said you were one of that main writers of the doc, but I didn't see your name on the list of EPA reps. If you are not the right person, could you forward this to that person.

I know John McKinney has been the DHS rep on this project, and he is a great rad/nuc policy guy, but not an HP.

I have some questions that may lead to comments on the draft PAG guide.

1. Did you consider those nuclides that have more risk associated with organ doses versus a whole body effect? I am thinking radium and iodine, but I know there are others. FGR-11 DCFs highlight those with risk-dominating organ doses. I think we need to integrate this idea into the doc with a short section and example calculation. I would recommend a 5 rem organ specific PAG, with associated modification of the DRL calculations for the relevant nuclides.

2. I think you mention FGR-13 (a CD supplement) as a source for DCFs, but that is a cancer risk document. FGR-11 is the appropriate reference. It may just have been a typo, or there is something on the CD with which I am unfamiliar.

3. I had a third issue, but can't for the life of me remember what it was….I will follow up when I remember.

Thanks for any background you can give me and let me know what you think

Cheers,

Andy

Andrew L. Scott, PhD, CHP

Senior Radiological/Nuclear Health Advisor

Health Threats Resilience Division

Office of Health Affairs

Department of Homeland Security

202-254-8629 (Desk)

202-815-6418 (Cell)

202-254-2303 (Fax)

andrew.scott@hq.dhs.gov

andrew.scott@dhs.sgov.gov

To: DeCair, Sara[DeCair.Sara@epa.gov]
From: Wieder, Jessica
Sent: Thur 12/17/2015 5:30:13 PM
Subject: RE: Drinking Water PAG

I told you that they had a holiday deadline to keep thing package moving! Awesome news!

Jessica Wieder
U.S. EPA
Radiation Protection Program
Center for Radiation Information and Outreach
w: 202-343-9201
c: 202-420-9353

From: DeCair, Sara
Sent: Thursday, December 17, 2015 12:17 PM
To: Ellis, Jerry; Wieder, Jessica
Subject: RE: Drinking Water PAG

Hi, thanks for keeping me informed! Once you have a final version, I can post it on the OneDrive folder for our drinking water PAG FR package.

I ran into Margo from OMB yesterday and she said she's got the message ready to send the proposal out to the interagency for the OMB-level review! Exciting progress, I think...

Sara

-----Original Message-----
From: Ellis, Jerry
Sent: Thursday, December 17, 2015 10:25 AM
To: Wieder, Jessica <Wieder.Jessica@epa.gov>; Wadlington, Christina <Wadlington.Christina@epa.gov>
Cc: DeCair, Sara <DeCair.Sara@epa.gov>
Subject: RE: Drinking Water PAG

Thank you Jessica. Christina just wanted to point out a minor correction to make in the first sentence of the 4th paragraph: " The proposed projected doses are based on one year of exposure, unlike the SDWA, dose-based MCL, which is assumes 70 years of continuous exposure. Maybe delete "is" or replace with "it".
Everything else looks good to me.

Jerry L. Ellis, Jr.
Environmental Scientist
U.S. Environmental Protection Agency
Standards and Risk Management Division
Office of Ground Water and Drinking Water
1200 Pennsylvania Ave. (4607M), N.W.
Washington, D.C. 20460
Phone: 202-564-2766

-----Original Message-----
From: Wieder, Jessica
Sent: Thursday, December 17, 2015 9:58 AM
To: Wadlington, Christina <Wadlington.Christina@epa.gov>

Cc: Ellis, Jerry <Ellis.Jerry@epa.gov>; DeCair, Sara <DeCair.Sara@epa.gov>
Subject: RE: Drinking Water PAG

Hi Christine and Jerry,

Attached are my suggestions and comments. I am teleworking today. Feel free to call me at 202-420-9353.

Jess

Jessica Wieder
U.S. EPA
Radiation Protection Program
Center for Radiation Information and Outreach
w: 202-343-9201
c: 202-420-9353

From: Wadlington, Christina
Sent: Thursday, December 17, 2015 8:33 AM
To: Wieder, Jessica
Cc: Ellis, Jerry
Subject: FW: Drinking Water PAG

Good Morning Jessica,

In order to prepare for the upcoming release of the Draft PAG Guidelines, based on the current news attention, I tweaked the existing Desk Statement to respond to potential inquiries.

When possible, can you review and let Jerry/I know if you have any edits or comments?

Thank you!

Christina Wadlington
U.S. Environmental Protection Agency
Office of Ground Water and Drinking Water
Tel: 202.566.1859
Email: wadlington.christina@epa.gov<mailto:wadlington.christina@epa.gov>

From: Christ, Lisa
Sent: Wednesday, December 16, 2015 5:19 PM
To: Wadlington, Christina <Wadlington.Christina@epa.gov>
Cc: Hernandez-Quinones, Samuel <Hernandez.Samuel@epa.gov>; Ellis, Jerry <Ellis.Jerry@epa.gov>
Subject: RE: Drinking Water PAG

Hi Christina,
I'd suggest you work with Jessica Wieder in OAR and Jerry on revisions before we have management review.
Lisa

From: Wadlington, Christina
Sent: Monday, December 14, 2015 10:05 AM
To: Christ, Lisa <Christ.Lisa@epa.gov<mailto:Christ.Lisa@epa.gov>>

Cc: Hernandez-Quinones, Samuel
<Hernandez.Samuel@epa.gov<mailto:Hernandez.Samuel@epa.gov>>; Ellis, Jerry
<Ellis.Jerry@epa.gov<mailto:Ellis.Jerry@epa.gov>>
Subject: RE: Drinking Water PAG

Thanks Lisa,

Provided is a clean copy that incorporates your edits. Did you want me to coordinate with OAR (which I am happy to) or did you/your staff want to (which I am fine with also)? Or did you want to provide them with a copy after our Office reviews?

Any path works for me. Please let me know.
Thank you.

Christina Wadlington
U.S. Environmental Protection Agency
Office of Ground Water and Drinking Water
Tel: 202.566.1859
Email: wadlington.christina@epa.gov<mailto:wadlington.christina@epa.gov>

From: Christ, Lisa
Sent: Monday, December 14, 2015 10:00 AM
To: Wadlington, Christina <Wadlington.Christina@epa.gov<mailto:Wadlington.Christina@epa.gov>>
Cc: Hernandez-Quinones, Samuel
<Hernandez.Samuel@epa.gov<mailto:Hernandez.Samuel@epa.gov>>; Ellis, Jerry
<Ellis.Jerry@epa.gov<mailto:Ellis.Jerry@epa.gov>>
Subject: RE: Drinking Water PAG

Christina,
Attached are my comments. The OAR communication folks were involved with preparing materials. We may need to coordinate with them too.
Lisa

From: Wadlington, Christina
Sent: Friday, December 11, 2015 12:08 PM
To: Christ, Lisa <Christ.Lisa@epa.gov<mailto:Christ.Lisa@epa.gov>>
Cc: Hernandez-Quinones, Samuel
<Hernandez.Samuel@epa.gov<mailto:Hernandez.Samuel@epa.gov>>
Subject: RE: Drinking Water PAG

Lisa,

Provided is a draft desk statement for your consideration. I tried to make it simple but capture the key issues that you and Sam discussed.

Your thoughts and edits are most welcome, as this is intended to be a starting point. Once we get a good draft, I would request Eric's edits, then I can move it through Peter.

Please let me know if you have any questions.
Thank you.

Christina Wadlington
U.S. Environmental Protection Agency

Office of Ground Water and Drinking Water
Tel: 202.566.1859
Email: wadlington.christina@epa.gov<mailto:wadlington.christina@epa.gov>

From: Christ, Lisa
Sent: Friday, December 11, 2015 9:20 AM
To: Wadlington, Christina <Wadlington.Christina@epa.gov<mailto:Wadlington.Christina@epa.gov>>
Cc: Hernandez-Quinones, Samuel
<Hernandez.Samuel@epa.gov<mailto:Hernandez.Samuel@epa.gov>>
Subject: RE: Drinking Water PAG

Hi Christina,
Please feel free to tweak the existing desk statement. If OMB completes review by Feb. 2 and we don't have significant comments, we can revise the proposal, FRN and comm materials in 1-2 weeks for DD,OD and AA review. So, mid to late March… Lisa

From: Wadlington, Christina
Sent: Friday, December 11, 2015 9:09 AM
To: Christ, Lisa <Christ.Lisa@epa.gov<mailto:Christ.Lisa@epa.gov>>
Cc: Hernandez-Quinones, Samuel
<Hernandez.Samuel@epa.gov<mailto:Hernandez.Samuel@epa.gov>>
Subject: Drinking Water PAG

Lisa,

In light of the recent article on PAGs, I think it might be a good idea to get at least the desk statement updated so we have the messaging ready? I am happy to tweak the existing one and provide for your feedback, if that works for you?

Also, if timing goes perfectly (90 OMB review), when would we expect the Guidance to cross the AA's desk and be public?

Christina Wadlington
U.S. Environmental Protection Agency
Office of Ground Water and Drinking Water
Tel: 202.566.1859
Email: wadlington.christina@epa.gov<mailto:wadlington.christina@epa.gov>

From: Christ, Lisa
Sent: Friday, December 04, 2015 3:47 PM
To: Wadlington, Christina <Wadlington.Christina@epa.gov<mailto:Wadlington.Christina@epa.gov>>
Subject: FW: Drinking Water PAG documents requested by Joel

From: Christ, Lisa
Sent: Friday, December 04, 2015 10:58 AM
To: Greene, Ashley <Greene.Ashley@epa.gov<mailto:Greene.Ashley@epa.gov>>; Mason, Paula
<Mason.Paula@epa.gov<mailto:Mason.Paula@epa.gov>>
Cc: Penman, Crystal <Penman.Crystal@epa.gov<mailto:Penman.Crystal@epa.gov>>
Subject: Drinking Water PAG documents requested by Joel

At today's briefing, Joel requested the attached documents. Please forward to the appropriate contact.
Thanks!
Lisa

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Lisa Christ, Chief
Targeting and Analysis Branch
Office of Ground Water and Drinking Water USEPA
1200 Pennsylvania Ave NW
Washington, DC 20460-0001
phone: 202.564.8354
fax: 202.564-3760
Mail Code: 4607M
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

To: DeCair, Sara[DeCair.Sara@epa.gov]
From: Hill, Glynis
Sent: Thur 12/10/2015 4:52:10 PM
Subject: RE: Drinking Water PAG

Thank you! I will keep you in the loop!

Glynis Hill – Environmental Scientist | Office of the Administrator | Office of Policy | Office of Regulatory Policy & Management

(202) 564-1139 | 3512V WJC North | Mail Code 1803 | 1200 Pennsylvania Avenue, NW | Washington, DC 20460

From: DeCair, Sara
Sent: Thursday, December 10, 2015 11:47 AM
To: Hill, Glynis <Hill.Glynis@epa.gov>
Cc: Veal, Lee <Veal.Lee@epa.gov>; Christ, Lisa <Christ.Lisa@epa.gov>
Subject: RE: Drinking Water PAG

Timeline for full Manual final and out? Late fall 2016.

From: Hill, Glynis
Sent: Thursday, December 10, 2015 11:46 AM
To: DeCair, Sara <DeCair.Sara@epa.gov>
Cc: Veal, Lee <Veal.Lee@epa.gov>; Christ, Lisa <Christ.Lisa@epa.gov>
Subject: RE: Drinking Water PAG

What is the answer to OMB's the last question?

Glynis Hill – Environmental Scientist | Office of the Administrator | Office of Policy | Office of Regulatory Policy & Management

(202) 564-1139 | 3512V WJC North | Mail Code 1803 | 1200 Pennsylvania Avenue, NW | Washington, DC 20460

From: DeCair, Sara
Sent: Thursday, December 10, 2015 11:37 AM
To: Hill, Glynis <Hill.Glynis@epa.gov>
Cc: Veal, Lee <Veal.Lee@epa.gov>; Christ, Lisa <Christ.Lisa@epa.gov>
Subject: RE: Drinking Water PAG

Glynis,

Here is the FR Notice and list of PAGs Subcommittee (of the Federal Radiological Emergency Preparedness Coordinating Committee) members and contact info. Thanks for facilitating this!

Sara

From: Hill, Glynis
Sent: Thursday, December 10, 2015 10:58 AM
To: DeCair, Sara <DeCair.Sara@epa.gov>
Cc: Veal, Lee <Veal.Lee@epa.gov>; Christ, Lisa <Christ.Lisa@epa.gov>
Subject: RE: Drinking Water PAG

Hey Sara:

Thanks for getting back to me so quickly... Is there someone in OW that can provide the detailed answers, since you are busy? If not, I look forward to receiving your detailed responses to all the questions as soon as you are able today.

Thanks again,

Glynis Hill – Environmental Scientist | Office of the Administrator | Office of Policy | Office of Regulatory Policy & Management

(202) 564-1139 | 3512V WJC North | Mail Code 1803 | 1200 Pennsylvania Avenue, NW | Washington, DC 20460

From: DeCair, Sara
Sent: Thursday, December 10, 2015 10:54 AM
To: Hill, Glynis <Hill.Glynis@epa.gov>
Cc: Veal, Lee <Veal.Lee@epa.gov>; Christ, Lisa <Christ.Lisa@epa.gov>
Subject: Re: Drinking Water PAG

Glynis, yes to all and I can get you the list of interagency members right about noon. I'm hosting a cfc event til then and far from my computer.

I thought for sure the package we sent up to OP had the FR notice in it?

Our timeline for final Manual is fall of 2016.

Sara

Sent from my iPhone

On Dec 10, 2015, at 10:37 AM, Hill, Glynis <Hill.Glynis@epa.gov> wrote:

Good morning ALL:

I'm pretty sure I know the answer to these questions; however I prefer it come directly from the program office. Please email as soon as possible your response to the following:

"*Glynis,*

Thanks for the offer of a technical briefing. I may take you up on that but (fortunately) I'll be working closely with Margo on this review so am able to draw upon her experience.

I'm preparing to send the document out for interagency review but could use some clarification first:

•□□□□□□□ *Do you have a draft FRN you can provide OMB (and, ideally, interagency reviewers) that puts this proposal into the proper context of the 2013 revision? If it is not*

available yet, can you let me know when we can see it?

•□□□□□□□ *Would it be correct to say that the draft PAG responds to public comments received by EPA?*

•□□□□□□□ *Did the Federal interagency committee on radiation review and provide comments on this PAG? If so, please provide me with a list of members and contact information so that I can include them on my distribution.*

•□□□□□□□ *Does EPA have a timeline for when it hopes to issue the final PAG Manual?"*

Thanks in advance,

Glynis Hill – Environmental Scientist | Office of the Administrator | Office of Policy | Office of Regulatory Policy & Management

(202) 564-1139 | 3512V WJC North | Mail Code 1803 | 1200 Pennsylvania Avenue, NW | Washington, DC 20460

From: DeCair, Sara
Sent: Wednesday, December 09, 2015 1:25 PM
To: Hill, Glynis <Hill.Glynis@epa.gov>
Cc: Veal, Lee <Veal.Lee@epa.gov>; Christ, Lisa <Christ.Lisa@epa.gov>
Subject: RE: Drinking Water PAG

Glynis,

Interesting! Looks like maybe the OMB reviewer is not Margo Schwab, who has reviewed the previous PAG documents that went over for review from DHS and EPA.

We didn't prepare an economic analysis because PAGs are non-binding non-regulatory

guidance, which officials can use (or not) to make local decisions about drinking water in response to a radiological contamination event.

The proposal itself has info about options we considered in the section "Factors EPA considered when establishing the drinking water PAG" as well as in the sections on Rationale and Other Standards that follow that one.

Let me know if we can talk with you or the reviewer about this - anytime - in fact if a technical briefing would help, just let us know. Thank you!

Sara

202-343-9108

From: Hill, Glynis
Sent: Wednesday, December 09, 2015 12:09 PM
To: DeCair, Sara <DeCair.Sara@epa.gov>
Subject: FW: Drinking Water PAG
Importance: High

Hey Sara:

As indicated below, I see that my email was read. I am being pressed for an answer and will have to respond to OMB very soon. Please get back to me as expeditiously as possible. Thanks in advance.

Glynis Hill – Environmental Scientist | Office of the Administrator | Office of Policy | Office of Regulatory Policy & Management

(202) 564-1139 | 3512V WJC North | Mail Code 1803 | 1200 Pennsylvania Avenue, NW | Washington, DC 20460

From: DeCair, Sara
Sent: Wednesday, December 09, 2015 10:56 AM
Subject: Read: Drinking Water PAG
Importance: High

Your message

To: DeCair, Sara
Subject: Drinking Water PAG
Sent: Wednesday, December 9, 2015 10:20:03 AM (UTC-05:00) Eastern Time (US & Canada)

was read on Wednesday, December 9, 2015 10:55:13 AM (UTC-05:00) Eastern Time (US & Canada).

To: DeCair, Sara[DeCair.Sara@epa.gov]
From: Hill, Glynis
Sent: Thur 11/19/2015 7:25:16 PM
Subject: RE: Comments on PAG_Document1

Hey Sara:

Don't forget to send a clean updated version back to OP.

Glynis Hill – Environmental Scientist | Office of the Administrator | Office of Policy | Office of Regulatory Policy & Management

(202) 564-1139 | 3512V WJC North | Mail Code 1803 | 1200 Pennsylvania Avenue, NW | Washington, DC 20460

From: DeCair, Sara
Sent: Thursday, November 19, 2015 11:21 AM
To: Hill, Glynis <Hill.Glynis@epa.gov>
Subject: RE: Comments on PAG_Document1

Okay I hope this lady from HR who's supposed to talk to me at noon actually chooses 12 and wraps up by then – she's in LV so who knows. Will update you if it goes awry!

From: Hill, Glynis
Sent: Thursday, November 19, 2015 11:19 AM
To: DeCair, Sara <DeCair.Sara@epa.gov>
Subject: RE: Comments on PAG_Document1

Im on a conference call until 12; so 12:30 is GREAT!

Glynis Hill – Environmental Scientist | Office of the Administrator | Office of Policy | Office of Regulatory Policy & Management

(202) 564-1139 | 3512V WJC North | Mail Code 1803 | 1200 Pennsylvania Avenue, NW | Washington, DC 20460

From: DeCair, Sara
Sent: Thursday, November 19, 2015 11:18 AM
To: Hill, Glynis <Hill.Glynis@epa.gov>
Subject: RE: Comments on PAG_Document1

Maybe now? Or 12:30 pm? Thanks!

343-9108

From: Hill, Glynis
Sent: Thursday, November 19, 2015 10:18 AM
To: DeCair, Sara <DeCair.Sara@epa.gov>
Subject: RE: Comments on PAG_Document1

Please call me when you get a chance today, if possible; also email me with a time that will work so I can make sure I'm available.

Glynis Hill – Environmental Scientist | Office of the Administrator | Office of Policy | Office of Regulatory Policy & Management

(202) 564-1139 | 3512V WJC North | Mail Code 1803 | 1200 Pennsylvania Avenue, NW | Washington, DC 20460

From: DeCair, Sara
Sent: Wednesday, November 18, 2015 7:35 PM
To: Hill, Glynis <Hill.Glynis@epa.gov>
Subject: Re: Comments on PAG_Document1

So quick look from the airport:

mSv and mrem are defined earlier in the larger Manual that this'll go into but we should define that here for te proposal!

The MCLs for nuclides vary but for instance the one for iodine is 3 pCi/L.

A surveillance program is suggested but the PAGs are very careful to not make any requirements of a regulatory nature. More implementation guidance will be provided and we also refer to FRMAC who helps in an emergency, later.

The monitoring for vulnerable systems are SDWA per the footnote refs.

Did I help? I am desperately trying to get home tonight from Chicago but am not confident with al the delays. Can talk via phone tomorrow though!

Sara

Sent from my iPhone

On Nov 18, 2015, at 4:50 PM, Hill, Glynis <Hill.Glynis@epa.gov> wrote:

> Hey Sara:
>
> Attached are some very minor comments and/or questions I have in reference to the above-mentioned document. Please disregard the YELLOW highlights those are for my edification. I look forward to hearing from you soon so we can WRAP this thing up☺!
>
> Thanks in advance,

Glynis Hill – Environmental Scientist | Office of the Administrator | Office of Policy | Office of Regulatory Policy & Management

(202) 564-1139 | 3512V WJC North | Mail Code 1803 | 1200 Pennsylvania Avenue, NW | Washington, DC 20460

<PAG_Document1.docx>

To: DeCair, Sara[DeCair.Sara@epa.gov]
From: Hill, Glynis
Sent: Thur 11/19/2015 5:05:16 PM
Subject: RE: Comments on PAG_Document1

Let's make it 1:30 then I just got pulled into another meeting and will need a facility BREAK in between ;-0

Glynis Hill – Environmental Scientist | Office of the Administrator | Office of Policy | Office of Regulatory Policy & Management

(202) 564-1139 | 3512V WJC North | Mail Code 1803 | 1200 Pennsylvania Avenue, NW | Washington, DC 20460

From: DeCair, Sara
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To: Hill, Glynis <Hill.Glynis@epa.gov>
Subject: RE: Comments on PAG_Document1

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To: DeCair, Sara <DeCair.Sara@epa.gov>
Subject: RE: Comments on PAG_Document1

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Glynis Hill – Environmental Scientist | Office of the Administrator | Office of Policy | Office of Regulatory Policy & Management

(202) 564-1139 | 3512V WJC North | Mail Code 1803 | 1200 Pennsylvania Avenue, NW | Washington, DC 20460

From: DeCair, Sara
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343-9108

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Subject: RE: Comments on PAG_Document1

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Glynis Hill – Environmental Scientist | Office of the Administrator | Office of Policy | Office of Regulatory Policy & Management

(202) 564-1139 | 3512V WJC North | Mail Code 1803 | 1200 Pennsylvania Avenue, NW | Washington, DC 20460

From: DeCair, Sara
Sent: Wednesday, November 18, 2015 7:35 PM
To: Hill, Glynis <Hill.Glynis@epa.gov>
Subject: Re: Comments on PAG_Document1

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Sara

Sent from my iPhone

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>
> Thanks in advance,

Glynis Hill – Environmental Scientist | Office of the Administrator | Office of Policy | Office of Regulatory Policy & Management

(202) 564-1139 | 3512V WJC North | Mail Code 1803 | 1200 Pennsylvania Avenue, NW | Washington, DC 20460

<PAG_Document1.docx>

EPA REGIONAL EMERGENCY OPERATIONS CENTERS (REOC)

REGION I	617-723-8928
REGION II	800-424-8802
REGION III	215-814-3255
REGION IV	404-562-8700
REGION V	312-353-2318
REGION VI	866-372-7745
REGION VII	913-281-0991
REGION VIII	303-293-1788
REGION IX	800-300-2193
REGION X	206-553-1263

If you have questions or comments about this Incident Management Handbook, please contact Roberta Runge, OEM, Preparedness and Response Operations Division, at Runge.Roberta@epa.gov.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE: December 2015

SUBJECT: US Environmental Protection Agency Incident Management Handbook

PURPOSE: The US Environmental Protection Agency (EPA) Incident Management Handbook (IMH) is designed to assist EPA personnel in the use of the Incident Command System (ICS) and the National Incident Management System (NIMS) during incident response operations and planned events. One of the major objectives of the IMH is to assist EPA responders by providing guidance on the integration of EPA assets into the ICS structure while maintaining the standard structure and functions. This IMH is intended as a guidance document for responders and management to understand what their positions require under NIMS ICS and how they integrate with the rest of the response structure. It is a guidance document only, and users are encouraged to refer to Incident Action Plans (IAPs), incident objectives, and attend briefings and meetings as required by their positions within the ICS.

This IMH was developed to align with the US Coast Guard's IMH with modifications to address EPA-specific requirements, processes, and procedures. The Agency's response management processes should be consistent with other partner agencies that share the environmental mission within the National Response System (NRS) and in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP 40 CFR Part 300) and the National Response Framework (NRF).

ACTION: Regional On-Scene Coordinators (OSCs), Agency staff involved in responses, and Response Support Corps (RSC) personnel, should refer to this IMH when involved in emergency response operations.

BACKGROUND: Over the past decade, EPA has faced unprecedented challenges in responding to Nationally Significant Incidents, including the World Trade Center and Pentagon terrorist attacks, the 2001 anthrax attacks, the Columbia Space Shuttle recovery, Hurricanes Katrina and Rita, and most recently the Deepwater Horizon, Enbridge, and Yellowstone River oil spills, Super Storm Sandy and the Gold King Mine response. The Agency did an excellent job in responding to these incidents because of the experience and expertise of our

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emergency response program, as well as the experience we have gained over the past 15 years in response management. However, as with every response, lessons learned and corrective actions need to be addressed. The Deepwater Horizon response highlighted inconsistency in implementation of ICS between responding agencies. In some cases, EPA personnel responding to the incident did not have an assigned ICS position or were not even familiar with the system, which caused confusion in roles and responsibilities. To resolve this issue, the EPA Office of Emergency Management (OEM) is working with the EPA NIMS Integration Team (NIT) to arrange joint exercises with response partners, and to improve ICS training material and access to training for all programs. Another issue that arose during the Deepwater Horizon response was with data management, including inconsistencies in methodology in data delivery, Quality Assurance/Quality Control, a lack of standardization of terminology, templates, and interfaces, and unfamiliarity with the Emergency Management Portal (EMP) and Scribe. To address this issue, OEM will develop a strategy to familiarize other programs with the EMP and Scribe, and work with the EPA Information Technology Forum on correcting problems with methodology, templates, and interfaces with other databases. Additionally, OEM will continue to move forward on development of electronic data deliverables and Web Electronic Deliverable Registry which will expedite analytical data review.

The response to Super Storm Sandy highlighted the success of communications and coordination between the Regional Emergency Operations Centers (REOCs) and the Headquarters (HQ) EOC by ensuring information sharing occurred horizontally and vertically across the Agency. In this way, EPA was able to work as a team and add order and efficiencies to the stresses of a response.

The Gold King Mine response required the establishment of Area Command to coordinate critical resources and response actions of the Incident Command Posts. Coordination between the HQ EOC and the Area Commander was a critical component of the response and highlighted the need for additional training on wide area responses including engagement of states and locals and consistent messaging to the public and media outlets.

As the scope and complexity of incidents and threats expand, EPA must continue to strengthen and reinforce its response management capabilities. To that end, EPA is continuously improving its implementation of NIMS in order to maximize its management of its emergency response assets during Nationally Significant Incidents. By implementing NIMS, as required by the Homeland Security Presidential Directive (HSPD)-5, we are managing expertise and response capabilities within the Agency and are therefore better prepared to effectively handle large unprecedented incidents with our response partners.

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The NIMS ICS provides a common structure and terminology that facilitates the integration of multiple agencies while still maintaining a coherent chain of command. This approach provides consistency in addressing key aspects of a response such as organizational elements and lines of communication. It also ensures that roles and responsibilities of EPA personnel, whether in the Incident Command Post (ICP) or in a support role in a regional office, are clearly understood. EPA's goal is to integrate into the local ICS if established and then, if needed, bring in our own Incident Management Team (IMT) to manage or lead the response.

Additionally, the ability of EPA to coordinate between management and tactical operations in the field is critical. Consistent, clear, and effective communications and information sharing between the executive levels to the Incident Commander (IC) is a necessity. The use of existing regulatory and delegated authorities provided to OSCs as well as coordination with National and Regional Incident Coordination Teams (RICT), HQ EOC, and the various REOCs are essential to this process.

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HOW TO USE THE INCIDENT MANAGEMENT HANDBOOK (IMH)

The IMH was designed to serve as a reference guide for personnel working within an ICS in the field as well as management and the Regional Incident Coordinator (RIC) in the Regional Emergency Operation Centers (REOCs)

This IMH is not intended to take the place of appropriate ICS training for responders. The responsibilities of staff during a response may vary depending on the size and complexity of the incident. In a small response, a single responder may fulfill multiple roles, while a more complex or sustained response may require more dedicated staff. While it is important that all responders come into an incident with sufficient training and understanding of ICS, in a very large response the agency may be required to activate employees that have little experience responding in the field. The IMH will serve as a guide for all EPA responders.

Below is a guide on how to use this handbook. In addition to this concise field guide, further information and tools—specific to many individual positions—can be found in position-specific job aids which are posted on the NIMS Integration Team website at epaosc.org.

Please note that the IMH is <u>not</u> intended to be read in its entirety. You only need to refer to a chapter if it is relevant to the role/position you are filling in ICS. Some sections of the IMH are for all responders, while other sections contain specialized information that is only valuable to specific responders based on their positions within ICS in the field.

- Part I (Introduction and Background) is intended for all audiences. It is written to provide background information on EPA's specific application of ICS and also provides a summary of common responsibilities of all responders.

- Part II (ICS Process, Tools, and Position Responsibilities) is written to explain the ICS Planning Cycle, tools, and as a reference for the responsibilities associated with each individual position in the command structure. Users should review the responsibilities specific to their assigned positions, and those they interact with on an as-needed basis.

- Part III (Modular Response Organization) provides a description of the scalable nature of ICS in its potential expansion from a small organization to a large, complex and/or multijurisdictional incident, including a geographically widespread incident or multiple incidents. This part

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provides considerations for the establishment of the command organization, provides additional duties or responsibilities specific to large incidents for Command and General Staff positions (in addition to those in Part II), and provides information on Special Teams.

- Part IV provides additional organizational examples for specific types of response events. When using these chapters, readers should understand that the responsibilities discussed are in addition to those outlined in the first three parts of this handbook and more than one of these chapters may be applicable to a specific incident (e.g., biological event with law enforcement and animal response issues). The chapters in this part also include information on special teams and assets, which may assist in incidents involving those specific scenarios.

- Part V provides reference material.

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U.S. ENVIRONMENTAL PROTECTION AGENCY INCIDENT MANAGEMENT HANDBOOK

INCIDENT COMMAND SYSTEM (ICS)

December 2015

Report Oil and Chemical Spills Toll Free

National Response Center: 1-800-424-8802

Local: 202-424-8802

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CHAPTER 1

INTRODUCTION

This Incident Management Handbook (IMH) is intended to be used as a reference aid for personnel involved in emergency response. This is not a policy document, but rather guidance for response personnel.

It does not affect existing On-Scene Coordinator (OSC) authorities or their discretion in determining how to implement those authorities (e.g., monitoring private sector response, overseeing activities, directing a response that poses a substantial threat). However, with a nationally significant incident, senior Agency leadership will be playing a role as defined in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP).

Historically, the Environmental Protection Agency (EPA) has played an important role in responding to environmental emergencies. More than 40 years ago, the NCP was established as the Federal Government's blueprint for responding to both oil spills and hazardous substance releases. A key component of the NCP is the National Response System (NRS), a multilayered response network of individuals and teams from Federal, state, local, and tribal agencies, and industry. The NRS includes:

- Reporting of incidents to the National Response Center (NRC);
- A cadre of Federal On-Scene Coordinators (OSCs);
- The National Response Team (NRT);
- 13 Regional Response Teams (RRTs); and

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- “Special Teams” that provide specific expertise to assist OSCs.

The NCP and the NRS provide the foundation of EPA’s Emergency Response Program. For more information on the NRS, see www.nrt.org.

After September 11th 2001, EPA implemented the National Approach to Response (NAR) to manage its emergency response assets during a Nationally Significant Incident in a coordinated manner. The NAR policy can be found on the EPA intranet under “OSWER National Approach to Response.” The NAR describes EPA’s internal system for engaging Regional Incident Management Teams (IMTs), Response Support Corps (RSC) members, Regional Incident Coordinators (RICs), and Headquarters (HQ) staff and senior leadership during a response.

In accordance with Homeland Security Presidential Directive (HSPD)-5, EPA's field management structure for a response is the ICS. It is the organizational structure by which EPA will manage a response and integrate/ coordinate with Federal, state, local, and tribal response personnel and assets.

The IMH provides generic information applicable to all responses in the beginning of the document. The information and processes unique to a specific type of incident follow in the latter part of the document.

Each of the hazard-specific chapters addresses a specific type of incident and illustrates how response to an incident

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starts with first responders and then escalates to a large multiagency response organization. The organization charts in each chapter are only **examples** of how an ICS organization may be developed to respond to that type of incident. While the document has been divided into hazard-specific chapters, responders should be aware that more than one chapter may be applicable to a multi-hazard incident. Also, in each chapter are incident-specific job descriptions that will assist responders.

Responders should have a basic understanding of ICS to ensure they can effectively operate within the ICS organization, and properly understand and use this IMH.

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CHAPTER 2

ORGANIZATION, COMMAND, AND COORDINATION WITHIN EPA

This chapter provides an overview of the structure used to coordinate EPA's response operations consistently across the Agency when supporting a field response. It reflects existing emergency response structures and policies, such as the EPA's National Approach to Response (NAR), which defines roles and authorities within the Agency, and describes the general and specialized assets available to emergency responders in the field.

INCIDENT COMMAND SYSTEM IS ALWAYS USED

The Incident Command System (ICS) concepts will be utilized by the EPA during all emergency responses, whether they are small incidents (80% of responses) or Nationally Significant Incidents (<1% of responses).

ICS is a flexible, scalable structure that provides standardized processes, procedures, organizational structure, and common terminology for incident management. The system creates a basic expectation for emergency management which allows us to better coordinate between the various levels of the Agency and interagency. This management structure is built around five major response management functional areas: Command, Operations, Planning, Logistics, and Finance.

Emergency response actions are usually successfully managed within the region. Upon occasion, incidents may

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be of such magnitude that they exceed regional emergency response capacities, or transcend regional boundaries. These incidents most often may be the result of a chemical, biological, or radiological emergency, natural disaster, or cyber related incident.

SCALE OF RESPONSE WILL INCREASE DURING A NATIONALLY SIGNIFICANT INCIDENT

EPA recognizes that the response to a Nationally Significant Incident will require senior management attention and extraordinary coordination internally, and among Federal, state and local entities. During a Nationally Significant Incident, ICS is applied in conjunction with the National Response Framework (NRF). The NRF organizes and integrates Federal resources under “Emergency Support Functions” (ESFs). ESFs identify critical response functions and which Federal agencies are responsible for providing those functions during a response (Figure 2-1).

It is the Agency’s intention to implement a nationally coordinated approach whenever we respond to a Nationally Significant Incident. This chapter details the roles of and support available from the “national level.” The national level will generally be fully activated only in cases of very large responses or a Nationally Significant Incident. Consistent, clear, and effective communications and information sharing from the executive levels to Incident/Unified Command and from the incident to the executive levels within the Agency is essential. The EPA model for national incident coordination and information exchange is shown in Figure 2-2.

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EPA has created a coordinated structure to enhance the Agency's ability to implement the operational components of a response by maintaining communication between senior management, providing resource support at a national or regional level, and supporting the incident command structure in the field. This structure includes the:

- National and Regional Incident Coordination Teams (NICT/RICTs);
- Regional Emergency Operations Centers (REOCs); and
- Headquarters Emergency Operations Center (HQ EOC).

REGIONAL LEVEL

The strategic direction for EPA involvement in a regional response is established by management objectives.

Regional Emergency Operations Center – To effectively respond, coordinate, and support a major regional or national incident, EPA regional offices will activate REOCs. The REOC is managed by a Removal Manager or designee. The REOC staff will:

- Provide immediate "reach-back" support to the Incident Commander (IC);
- Serve as the official channel for the flow of information between the field and the region, including the Regional Administrator (RA), the RICT, the HQ National Incident Coordinator (NIC), and the HQ EOC;
- Communicates and maintains situational awareness with other Regional EOCs involved in the response as well as the HQ EOC;

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- Assign and coordinate agency resources for field operations; and
- Coordinate Federal Emergency Management Agency (FEMA)/NRF/ESF/Regional Response Team (RRT) activities.

REGIONAL ROLES DURING A LARGE OR NATIONALLY SIGNIFICANT INCIDENT

Regional Administrator (RA) – The RA will:

- In consultation with HQ, establish the strategic direction and management objectives for the response, in consultation with Headquarters (HQ);
- Designate a Regional Incident Coordinator (RIC) to manage the REOC and serve as the primary contact with the IC and EPA Management;
- Resolve regional resource, cross-program and policy issues;
- Serve as the Agency regional spokesperson with public and elected officials;
- Ensure the effectiveness of the response to meet incident objectives; and
- Serve on the Policy Coordinating Executive Committee (PCC) and act as the principal contact between the PCC and the region.

Regional Incident Coordinator (RIC) – The RIC will:

- Serve as the primary point of contact with IC;
- Provide strategic/management objectives and oversight to the IC;

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- Provide clarification of regional policy issues; and
- Ensure effective and timely communication flow between field activities and upper level management.

It is important to remember that the RIC and REOC staff will not replace the ICS field structure or functions. The EPA IC will be responsible for determining incident objectives and strategy. During a Nationally Significant Incident it is essential that the IC and the RIC coordinate and communicate with each other to ensure that management objectives are being met.

Regional Incident Coordination Team (RICT) – The RICT is a standing team with representatives from each regional program office. This team provides multi-program policy and resource coordination, information sharing, technical assistance, and issue resolution through the RIC to ICs conducting on-scene emergency response activities. The RICT will:

- Provide cross-program resources and technical support for the response deployed through the REOC;
- Provide regional forum for resolution of management objectives and policy issues;
- Coordinate information in response to requests from Headquarters, elected officials, and the public;
- Provide a conduit for the RIC to the NICT;
- Provide coordination for Response Support Corps (RSC) involvement in the response; and
- Be chaired by RA/Deputy RA or Division Director (DD).

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NATIONAL LEVEL

In the case of a major emergency response or Nationally Significant Incident, HQ response support will be activated. An organizational chart showing the relationship between EPA HQ, the regions, and the IC/Incident Management Team (IMT) is shown in Figure 2-3.

The HQ EOC will serve as the primary contact point for information coming into the Agency and will disseminate information to appropriate parties. The EOC will also serve as the official channel for the flow of information between the region's REOC and HQ, and act as the interface between the impacted regions.

Headquarters Emergency Operations Center – The HQ EOC will:

- Serve as the primary hub for receiving and disseminating national level information about the incident;
- Serve as the official channel for the flow of information between the REOCs and HQ;
- Provide reach-back for support to the incident through the REOC (e.g., staff and other resources);
- Act as the coordination point for the Department of Homeland Security (DHS) National Operations Center (NOC);
- Facilitate cross-regional coordination;
- When one or more regions are impacted, coordinate the allocation of critical response resources;
- Set up along ICS functional areas, but will not replace

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the ICS field structure or functions nor direct tactical operations;

- Establish situation awareness via reports and conference calls with activated REOCs; and
- Monitor all activity via its 24/7 Watch Officer.

Associate Administrator for Homeland Security – During a Nationally Significant Incident, the Associate Administrator for Homeland Security serves as the principal Agency contact with the Department of Homeland Security and the White House National Security Council. Additionally, he/she provides Agency-wide policy, guidance and direction, and recommendations for resources on matters of homeland security.

National Incident Coordinator (NIC) – This role is filled by the Agency Emergency Coordinator who is the Director/Deputy Directorof OEM. The NIC will:

- Coordinate with the Regions to resolve policy issues and elevate/brief issues to the Policy Coordinating Executive Committee (PCC) as necessary;
- Chair the National Incident Coordination Team (NICT) to address cross programmatic policy issues; and
- Oversee the HQ EOC.

National Incident Coordination Team (NICT) – The NICT is a standing team of senior representatives from each HQ Office (Division Director or Deputy Office Director) which functions both in preparedness and emergency response roles. During a Nationally Significant Incident, the NICT is chaired by the NIC and will include a representative from the impacted region(s). During the response the NICT

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coordinates resources, resolves issues and keeps the PCC fully informed via the NIC.

- Policy Coordinating Executive Committee (PCC) **– The EPA Administrator may choose to convene a Policy Coordinating Executive Committee (PCC) consisting of appropriate Assistant Administrators (AAs) and RAs/DRA's as a response specific team. The PCC addresses significant Agency and inter-Agency policy issues and provides for the exchange of information among Agency Senior officials.**

EPA RESOURCES AVAILABLE TO SUPPORT ON SCENE INCIDENT MANAGEMENT ACTIVITIES

The following can be activated through the REOCs.

Regional Incident Management Teams (IMTs) – Each region has the capability of deploying an IMT to an incident. The function of an IMT, led by the IC, is to manage the tactical aspects of the response by developing and implementing incident objectives.

EPA IMTs may be used to support discrete, assigned operational sectors of a large, multiagency ICS organization during the emergency phase. EPA ICs with the IMTs' support will have the capability to assume the lead management role during the emergency response phase and sustain prolonged operations if needed.

EPA IMTs may be deployed as an entire team or as a partial mobilization to meet the needs of the incident.

Response Support Corps (RSC) – A key component of the NAR is the RSC which supplements the Agency's response staff. The RSC is comprised of staff from all program offices within EPA and provides a pool of trained personnel, technical experts, and additional response assets. Activation of RSC personnel should be coordinated through the RICT or the NICT (if there is HQ involvement).

Additional Support

In cases when a response is large and requires resources beyond those available in the responding region, REOCs can access additional resources through the inter-regional backup system. Through this system each EPA region has primary and secondary backup regions that can provide additional response support assets.

If support is needed beyond that, REOCs can request additional assistance through the HQ EOC. The HQ EOC maintains a national roster of personnel qualified to assist in response activities. During an activation for a Nationally Significant Incident, EPA as the ESF #10 Coordinating Agency can request assistance through other ESF support agencies as outlined in the NRF. EPA is a supporting agency for:

- ESF#3 Public Works and Engineering
- ESF#4 Firefighting
- ESF#5 Information and Planning
- ESF#8 Public Health and Medical Services
- ESF#11 Agriculture and Natural Resources
- ESF#13 Public Safety and Security

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- ESF#15 External Affairs

RESOURCES AVAILABLE FOR ON SCENE INCIDENT MANAGEMENT ACTIVITIES

National Response Team/Regional Response Teams
Regional Response Teams (RRTs) and the National Response Team (NRT) provide an organization for Federal agency field offices and state agencies' coordination of assistance and advice to the On-Scene Coordinator (OSC), acting as IC or other role, during response actions. RRT and NRT members do not respond directly to releases or spills, but may be called upon to provide incident-specific technical advice, equipment, or manpower to assist with a response. The RRTs and NRT may also coordinate regional and national interagency policy issues, respectively, in support of the OSC.

Special Teams – "Special Teams" mandated by the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) are available to provide technical specialists in support of the response at the request of the IC. Technical specialists may provide expertise in areas such as numerical modeling, site characterization, decontamination, clearance, waste management options, environmental chemistry, chemical hazard assessment, health and safety, remote sensing, etc. Contact information for the most commonly used teams can be found on the inside cover of this handbook.

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FIGURE 2-1: EMERGENCY SUPPORT FUNCTIONS

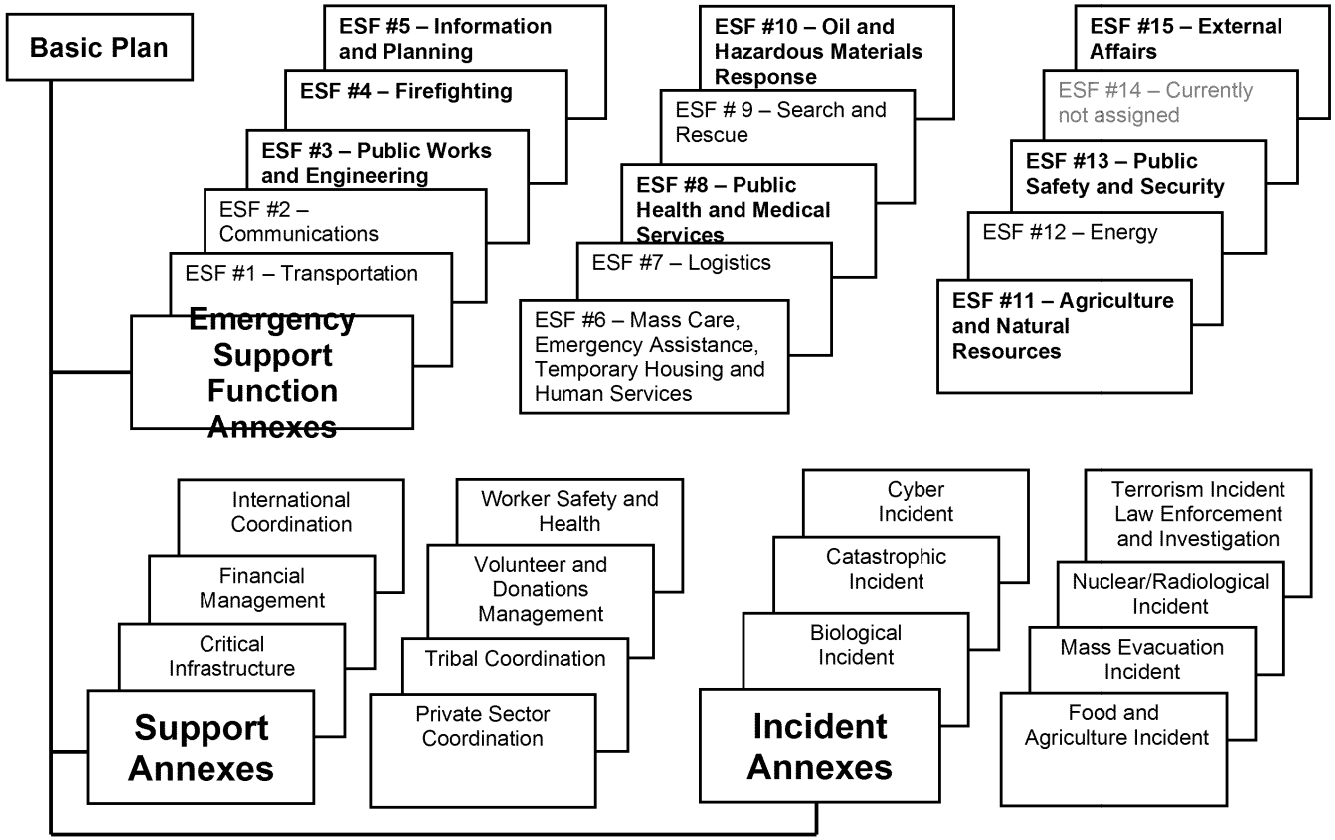

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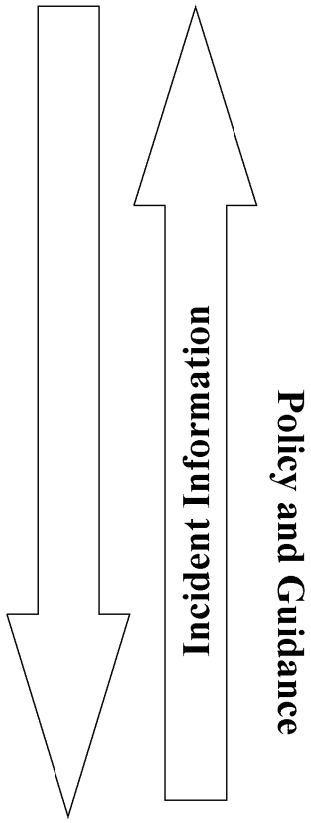
FIGURE 2-2: EPA INTERNAL AGENCY COORDINATION



Level of Coordination	Organizational Structure	Organizational Position	Roles & Responsibilities
National Coordination	Policy Coordinating Executive Committee HQ Emergency Operations Center (EOC) NICT	Administrator, DA, RAs, AAs National Incident Coordinator (NIC) HQ Senior Management	Provides Strategic/ Management Objectives Communicates with the RIC and REOC Provides cross-program support
Regional Coordination	RICT/JFO Regional Emergency	Regional Senior Management/Senior Federal Official Regional	Provides Strategic/ Management Objectives & cross-program support Communicates

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	Operations Center (REOC)	Incident Coordinator (RIC)	with IC and supports field operations
Tactical Coordination	Incident Command System	Incident or Area Commander	Operational Decision Making

FIGURE 2-3: EPA HQ, REGIONAL AND FIELD ORGANIZATIONAL CHART

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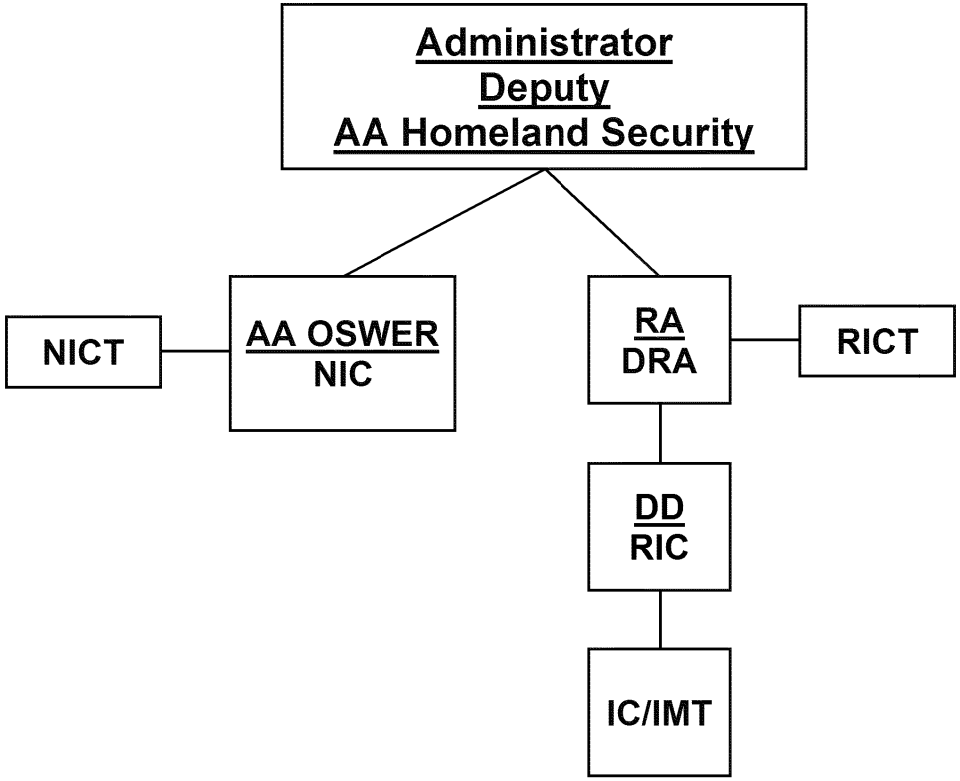

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CHAPTER 3

COMMON RESPONSIBILITIES

COMMON RESPONSIBILITIES – The following is a checklist applicable to all personnel in an Incident Command System (ICS) organization:

a. Receive assignment, including:
   - Job assignment (e.g., Operations Section Chief, Technical Specialist);
   - Reporting location;
   - Reporting time;
   - Travel instructions;
   - Any special communications instructions (e.g., radio frequency); and
   - Review EPA Incident Management Handbook (IMH).

b. Upon arrival at the incident, check in at the designated check-in location. Check-in may be found at any of the following locations:
   - Incident Command Post (ICP);
   - Base or Camps;
   - Staging Areas;
   - Area Command Post; and
   - Regional Emergency Operations Center (REOC).

   Note: If you are instructed to report directly to a field assignment, check in with your immediate field supervisor.

c. Receive briefing from immediate field supervisor,

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and/or receive orientation briefing, both of which must include a safety briefing;

d. Acquire work materials;

e. Field supervisors shall maintain accountability for their assigned personnel with regard to exact location(s), and for personal safety and welfare at all times, especially when working in or around incident operations;

f. Participate in Incident Management Team (IMT) meetings and briefings as appropriate;

g. Ensure compliance with all safety practices and procedures. Report unsafe conditions to the Safety Officer (SO);

h. Field supervisors are responsible for organizing and briefing staff;

i. Know your assigned communication methods and procedures for your area of responsibility and ensure that communication equipment is operating properly;

j. Use clear text (no codes) and ICS terminology in all radio communications;

k. Complete forms and reports required of the assigned position and ensure proper disposition of incident documentation as directed by the Documentation Unit;

l. Ensure all equipment is operational prior to each work period;

m. Brief ongoing operations when relieved, at the end of the operational rotations;

n. Return all assigned equipment to appropriate location;

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o. Complete demobilization check-out process before returning to home office;
p. Respond to demobilization orders and brief staff regarding demobilization;
q. At shift changes, brief incoming staff or receive briefing from outgoing staff; and
r. Maintain Unit/Activity Log (ICS 214 form).

UNIT LEADER RESPONSIBILITIES – In ICS, a number of the Unit Leader's responsibilities are common to all units in all parts of the organization. Common responsibilities of Unit Leaders are listed below. These will not be repeated in Unit Leader Position Checklists in subsequent chapters.

1. Review Common Responsibilities (page 3-1);
2. In addition to 1, the Unit Leader has the following responsibilities:
   a. Determine resource needs, order additional staff as appropriate, and replenish supplies via the Supply Unit Leader;
   b. Participate in incident Planning Meetings, as required;
   c. Determine current status of Unit activities;
   d. Confirm dispatch and estimated time of arrival of staff and supplies;
   e. Assign specific duties to staff and supervise staff;
   f. Develop and implement accountability, safety, and security measures for personnel and resources;
   g. Supervise demobilization of Unit, including storage of supplies;
   h. Direct volunteer inquiries to the Liaison Officer; and

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i. Maintain Unit records, including Unit/Activity Log (ICS 214 form).

CHAPTER 4

PLANNING CYCLE, MEETINGS, BRIEFINGS, AND THE PLANNING CHART

Figure 4-1 shows the initial response phase leading to the Incident Command System (ICS) Planning Cycle. If the responding Federal On-Scene Coordinator (OSC) determines that an expanded ICS organization will be needed to manage the response, the ICS 201-EPA form Incident Briefing will end the initial response phase and launch the ICS process. The 201 Brief is used by the Command and General Staff to brief their assigned personnel and to begin managing, monitoring, and planning the response. The Objectives Meeting should be held immediately afterward to establish jurisdictional limits, establish the operational period to be used in the response, and agree to the overall incident objectives and priorities.

OSCs should be aware that for a National Response Framework (NRF) incident[1], which includes disasters to which EPA responds under the Stafford Act (i.e., generally under a Mission Assignment (MA) from FEMA/DHS), the Department of Homeland Security (DHS) will activate additional response structures, above the Incident Command Post (ICP) level, at which Federal agencies will coordinate among themselves and with states/locals/ private sector. These include the Joint Field Office (JFO)

[1] EPA uses the term “Nationally Significant Incidents” to differentiate large scale responses from day to day response actions.

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and other NRF coordination entities managed by DHS. The JFO is a Multiagency Coordination (MAC) center established locally during activations of the NRF. The JFO is composed of a Coordination Group, Staff, and Sections staffed by agencies with onsite response authorities and support functions. The JFO may become involved in some operational aspects of the response such as search and rescue. The EPA regional emergency response program will be expected to send an EPA representative(s) to the JFO to staff the Emergency Support Function (ESF) #10 desk, while EPA Headquarters (HQ) will send a representative(s) to appropriate NRF coordinating entities. If the response has significant ESF #10 involvement, EPA HQ may send a Senior Federal Official (SFO) to the JFO Unified Coordination Group to provide strategic level guidance. The JFO Unified Coordination Group may also include officials representing other Federal departments or agencies with primary statutory responsibility and substantial assets for certain aspects of incident management. SFOs utilize existing authorities, expertise, and capabilities to assist in management of the incident, working in coordination with the Principal Federal Official, Federal Contracting Officer, Senior Federal Law Enforcement Official, and other members of the JFO Unified Coordination Group. In addition to the OSC's usual on-scene coordination, extra coordination will be needed with these other NRF response structures in order to develop/coordinate incident objectives.

The guidance provided in this chapter is a general approach for planning incident operations. As needed, the Incident Management Team (IMT) may choose to adapt this cycle to address operational realities. For example, in a geographically dispersed response, the Operations Briefing

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may be replaced with site-specific field supervisor briefings, especially once the Incident Action Plan (IAP) has stabilized and field operations have become routine. See page 4-24 for IAP components.

INITIAL RESPONSE AND ASSESSMENT

The period of Initial Response and Assessment occurs in all incidents. Short-term responses, which are small in scope or duration (e.g., a few resources working one operational period), can often be coordinated using only ICS 201 form (Incident Briefing Form).

INCIDENT BRIEFING (ICS 201-EPA form) – During the transfer-of-command process, an ICS 201-EPA form formatted briefing provides the incoming Incident Commander/Unified Command (IC/UC) with basic information regarding the incident situation and the resources allotted to the incident. Most importantly, it functions as the IAP for the initial response, and remains in force and continues to develop until the response ends or the incident's first IAP is generated. It is also suitable for briefing individuals newly assigned to the Command and General Staff.

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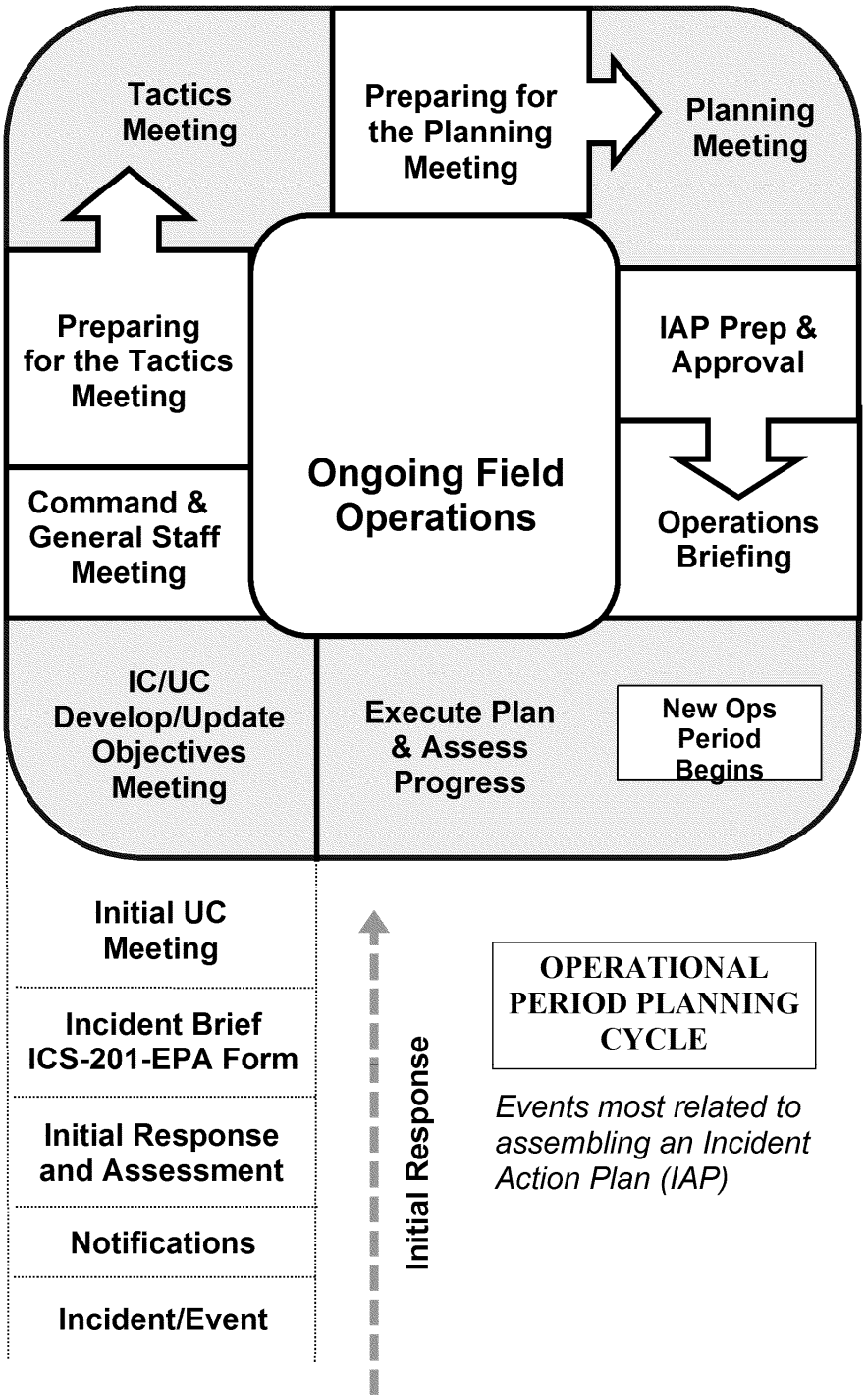
Figure 4-1: The Operational Period Planning Cycle



ICS 201-EPA FORM – Facilitates documentation of incident objectives, situational awareness, resource employment and deployment, and significant actions taken. This form is essential for future planning and the effective management of initial response activities.

When: Formation of new IC/UC; staff briefing as required.
Facilitator: Current IC/UC.
Attendees: Prospective IC/UC; Command and General Staff, as required.

General Tasks

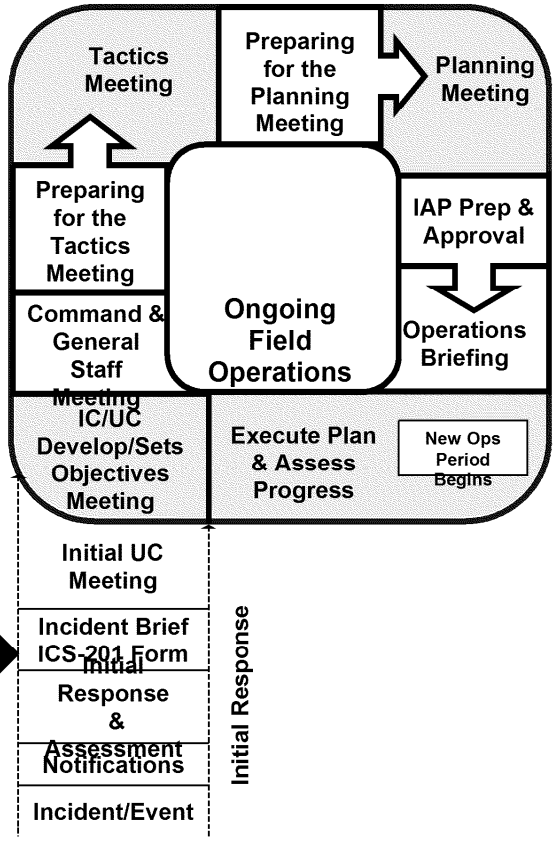
Incident Commander
- Obtain incident brief using ICS 201-EPA form;
- Assess operational requirements; and
- Determine current/future organizational and response requirement objectives.

Operations
- Obtain briefing from IC;
- Consider any available Contingency Plan;
- Develop strategies and tactics; and
- Assemble Resources.

Planning
- May not be activated at this time.

Logistics
- May not be activated at this time.

Finance/Administration
- May not be activated at this time.



Agenda:

Using ICS 201-EPA form as an outline, include:

1. Current situation (note jurisdiction, exposures, safety concerns, etc.; use map/charts).
2. Initial incident objectives and priorities.
3. Current and planned actions.
4. Current on-scene organization.
5. Resource assignments.
6. Resources in route and/or ordered.
7. Facilities established.
8. Potential for the incident to increase in magnitude.
9. Jurisdictions/organizations involved and media interests.

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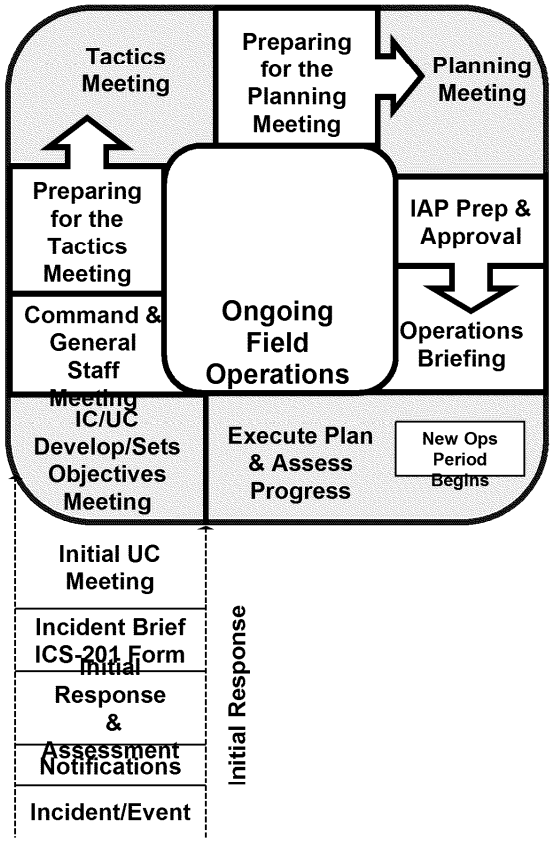
INITIAL UNIFIED COMMAND MEETING – Provides UC officials with an opportunity to discuss and concur on important issues prior to joint incident action planning. The meeting should be brief and important points and issues documented. Prior to the meeting, parties should have an opportunity to review and prepare to address the agenda items, entering the formal IAP planning process.

When: As soon as possible after the UC is formed.
Facilitator: UC member.
Attendees: Only ICs that will comprise the UC; note-taker if possible.

General Tasks

Incident Commander

- Determine need for UC;
- Negotiate/facilitate UC participation;
- Clarify UC roles & responsibilities;
- Negotiate and agree on response organization, facilities, and support;
- Determine operational period length/start time; and
- Designate OPS and Deputy OPS for the operational period. The OPS will be from the agency with regulatory authority for the response. However the Deputy OPS may be from a supporting agency or State agency as long as he/she is qualified to take over as OPS if the need arises.



Agenda:

1. Identify regulatory authority, jurisdictional priorities, and objectives.
2. Present jurisdictional limitations, concerns, and restrictions.
3. Develop a collective set of incident objectives.
4. Establish and agree on acceptable priorities.
5. Agree on basic organization structure.
6. Agree on operational period and work shifts, and develop meeting schedule.
7. Designate the best-qualified and acceptable Operations Section Chief (OPS) and Deputy or Deputies.
8. Agree on Command and General Staff personnel designations, and planning, logistical, and financial agreements and procedures.
9. Agree on resource ordering procedures to follow.
10. Agree on cost-sharing procedures.
11. Agree on sensitive information, intelligence, and operational security matters.
12. Designate a UC Public Information Officer (PIO).

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IC/UC OBJECTIVES MEETING – The UC will identify/review and prioritize incident objectives. For reoccurring meetings, objectives are reviewed and new objectives are identified as needed.

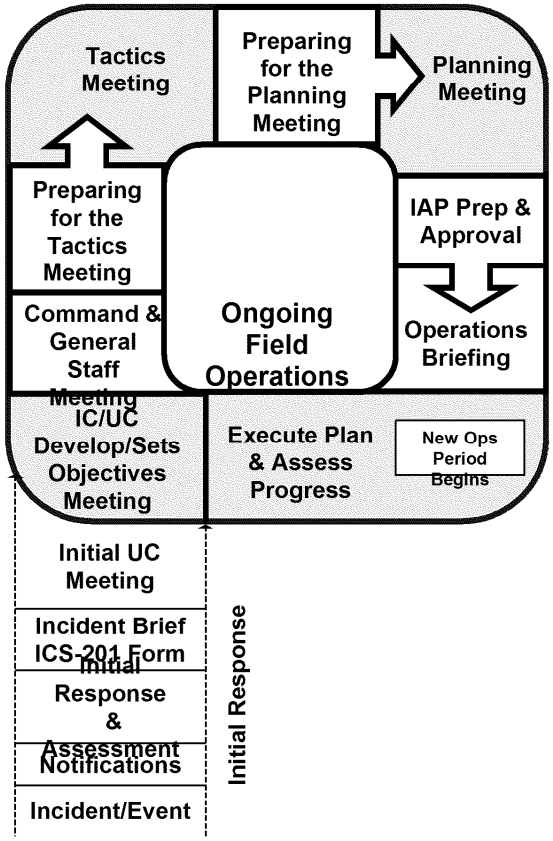
When: Prior to Command and General Staff Meeting.
Facilitator: IC/UC Member or Planning Section Chief (PSC) (if available).
Attendees: IC/UC Members; Selected Command and General Staff as appropriate, Documentation Unit Leader (DOCL).

General Tasks

Command
- Develop incident objectives in coordination with the RIC; and
- Prepare guidance for Command and General Staff (task).

Operations
- May be present if required.

Planning
- Facilitate and document meeting; and
- Propose draft objectives to Command.



Agenda:

1. PSC brings meeting to order, conducts roll call, covers ground rules, and reviews agenda.
2. Develop or review/select objectives.
3. Develop tasks for Command and General Staff to accomplish.
4. Review previous decisions, priorities, and procedures.
5. Review any open actions from previous meetings.
6. Prepare for the Command and General Staff Meeting.

COMMAND AND GENERAL STAFF MEETING – At the initial Command and General Staff Meeting, IC/UC will present their decisions and management direction to the Command and General Staff members. This meeting should clarify and help to ensure understanding among the core IMT members on the decisions, objectives, priorities, procedures and functional assignments (tasks) that the UC has discussed and reached agreement on. Ensuing Command and General Staff Meetings will cover any changes in Command direction, and review open actions and status of assigned tasks.

When: Prior to Tactics Meeting.
Facilitator: PSC.
Attendees: IC/UC Members, Command and General Staff and Situation Unit Leader (SITL).

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General Tasks

Command

- Review all decisions, direction, objectives, priorities, and procedures;
- Review response emphasis;
- Present/review functional work assignments (tasks) to the Command and General Staff members; and
- Review status of open actions, work assignments (tasks) from previous meetings.

Operations

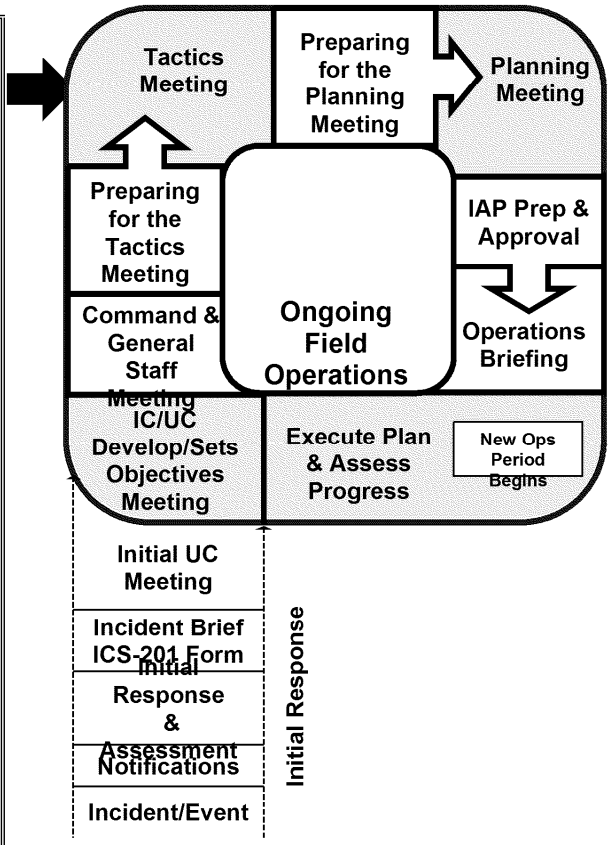
- Provide update on current operations.

Planning

- Facilitate and document meeting;
- Set up meeting room; and
- Ensure meeting is documented and distribute meeting materials.

Situation Unit Leader

- Provide update on current situation and projections if available.



Agenda:

1. PSC brings meeting to order, conducts roll call, covers ground rules, and reviews agenda.
2. SITL conducts situation status briefing.
3. IC/UC:
    a. Provides comments;
    b. Reviews response policies, procedures, and guidelines;
    c. Reviews direction and decisions;
    d. Discusses incident objectives and priorities; and
    e. Assigns functional tasks to Command and General Staff members.
4. PSC facilitates open discussion to clarify priorities, objectives, assignments, issues, concerns, and open actions/tasks.
5. IC/UC provides closing comments.

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PREPARING FOR THE TACTICS MEETING – During this phase of the Operational Planning Cycle, the OPS and PSC begin the work of preparing for the upcoming Tactics Meeting. They review incident objectives to determine those that are OPS' responsibility and consider Command priorities. They will draft a work analysis matrix (a range of strategies and tactics to meet those objectives assigned to OPS), an ICS 215-EPA form, and an Operations Section organization chart for the next operational period. Also, the Safety Officer (SO) should begin to develop the Hazard Risk Analysis, ICS 215a-EPA form. The PSC should facilitate/support this process to the greatest extent possible to ensure that the material, information, resources, etc. to be presented in the Tactics Meeting is organized and accurate.

When: Prior to Tactics Meeting.
Facilitator: PSC facilitates process.
Attendees: None. This is not a meeting but a period of time.

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General Tasks

Operations

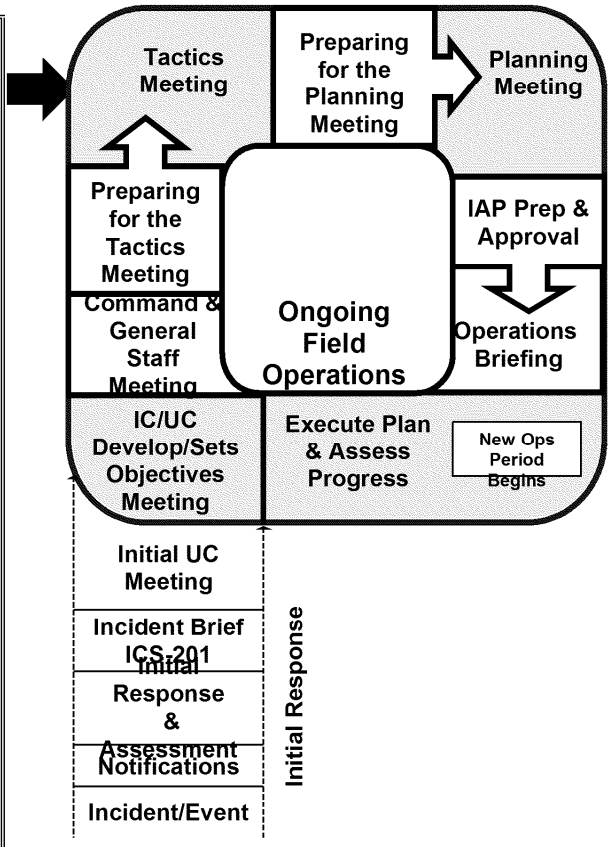
- Develop draft strategies and tactics for each operationally oriented incident objective;
- Outline work assignments (tactics) & required resources; and
- Develop/outline Operations Section organization for next operational period.

Planning

- Facilitate process;
- Review incident objectives & agree on those that are the responsibility of the Operations Section to complete;
- Ensure technical specialists are included and prepared to contribute as appropriate;
- Present situation information and provide projections.

Safety Officer

- Begin to develop the Hazard Risk Analysis ICS 215a-EPA form.



TACTICS MEETING – This meeting (30 minutes or less) creates the blueprint for tactical deployment during the next operational period. In preparation for the Tactics Meeting, the PSC and OPS review the first stage of response operations or the current IAP situation status information as provided by the Situation Unit to assess work progress against IAP incident objectives. The OPS and PSC will jointly develop primary and alternate strategies to meet objectives for consideration at the next Planning Meeting. It is the responsibility of the OPS to define the tactical needs of the response, and it is the responsibility of the PSC to coordinate with the OPS to support this tactical planning.

When: Prior to Planning Meeting.
Facilitator: PSC facilitates (as requested by OPS).
Attendees: PSC, OPS, Safety Officer, Logistics Section Chief (LSC), Resource Unit Leader (RESL), and Situation Unit Leader (SITL).

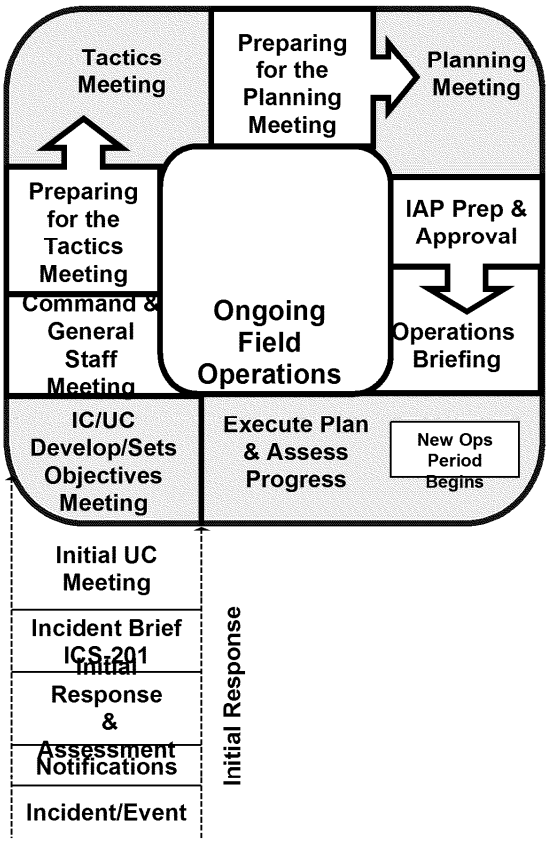
General Tasks

Operations
- Brief current operations;
- Present strategies, tactics and resource needs using ICS 215; and
- Present Operations Section Organization.

Planning
- Facilitate meeting;
- Present current situation and provide projections;
- Present resources status;
- Document meeting; and
- Set up meeting room.

Safety
- Identify potential hazards and recommend mitigation measures.

Logistics
- Participate/contribute logistics information as necessary; and
- Verify support requirements; and
- Prepare draft ICS 204 form.



Agenda:

1. As necessary, PSC brings meeting to order (as requested by OPS), conducts roll call, covers ground rules, and reviews agenda.
2. SITL reviews the current and projected incident situation.
3. PSC reviews incident objectives, and ensures accountability for each.
4. OPS reviews the Operations Work Analysis Matrix (strategy and tactics).
5. OPS reviews and/or completes a draft ICS 215-EPA form which addresses work assignments, resource commitments, contingencies, and needed support facilities (Resource Unit facilitates the development of the 215 in advance of the Planning Meeting).
6. OPS reviews and/or completes Operations Section organization chart.
7. SO identifies and resolves any critical safety issues.
8. LSC discusses and resolves any logistics issues.
9. PSC validates connectivity of tactics and incident objectives.
10. Prepare ICS 215a-EPA form.

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PREPARING FOR THE PLANNING MEETING – During this phase of the Planning Cycle, the Section Chiefs and their associated staff members begin the work of preparing for the upcoming Planning Meeting. Each Section Chief is responsible for ensuring that his/her Planning Meeting responsibilities are met. The PSC should facilitate this to the greatest extent possible to ensure that the material, information, resources, etc. to be used or discussed in the Planning Meeting is organized and prepared. There should be no surprises in the Planning Meeting. A "Pre-Planning Meeting" may be appropriate in large multiagency operations to ensure that all parties have an opportunity to see the proposed plan before the IC/UC approval is requested.

When: After the Tactics Meeting and prior to the Planning Meeting.

Facilitator: PSC ensures the process continues between meetings.

Attendees: None. This is not a meeting but a period of time.

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General Tasks

Incident Command

- Provide guidance/clarification;
- Monitor ongoing operations; and
- As needed meet informally with appropriate staff members.

Operations

- Continue operations;
- Prepare for Planning Meeting;
- Work with PSC/RESL to develop final draft of ICS 215 form; and
- Coordinate with other staff as needed.

Planning

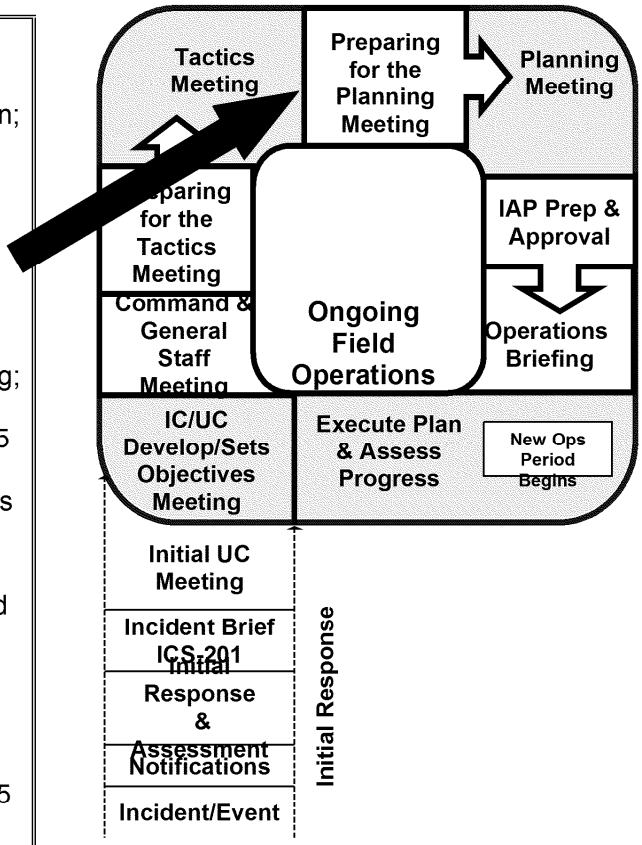
- Facilitate General Staff's and attendees' preparations for Planning Meeting;
- Publish/distribute meeting schedule and ensure attendees know roles;
- Prepare final draft of ICS 215 form (including resources).

Logistics

- Prepare for Planning Meeting;
- Verify support requirements; and
- Consider and order support requirements.

Finance/Admin

- Prepare for Planning Meeting; and
- Verify financial and administrative requirements.



PLANNING MEETING – This meeting defines incident objectives, strategies, and tactics, and identifies resource needs for the next operational period. Depending on incident complexity, this meeting should last no longer than 45 minutes. This meeting fine-tunes objectives and priorities, identifies and solves problems, and defines work assignments and responsibilities on a completed ICS 215-EPA form (Operations Planning Worksheet). Displays in the meeting room should include Objectives ICS 202-EPA form for the next period, large sketch maps or charts clearly dated and timed, a poster-sized ICS 215a-EPA form or equivalent, a current resource inventory prepared by the Resource Unit, and current situation status displays prepared by the Situation Unit. This meeting provides the opportunity for Command and General Staff to discuss and resolve any issues and concerns prior to assembling the IAP. After review and updates are made, Planning Meeting attendees commit to support the plan.

When: After the UC and Tactics Meetings.
Facilitator: PSC.
Attendees: Determined by IC/UC; generally IC/UC, Command Staff, General Staff, Air Operations Branch Director (AOBD), RESL, SO, SITL, and technical specialists as required.

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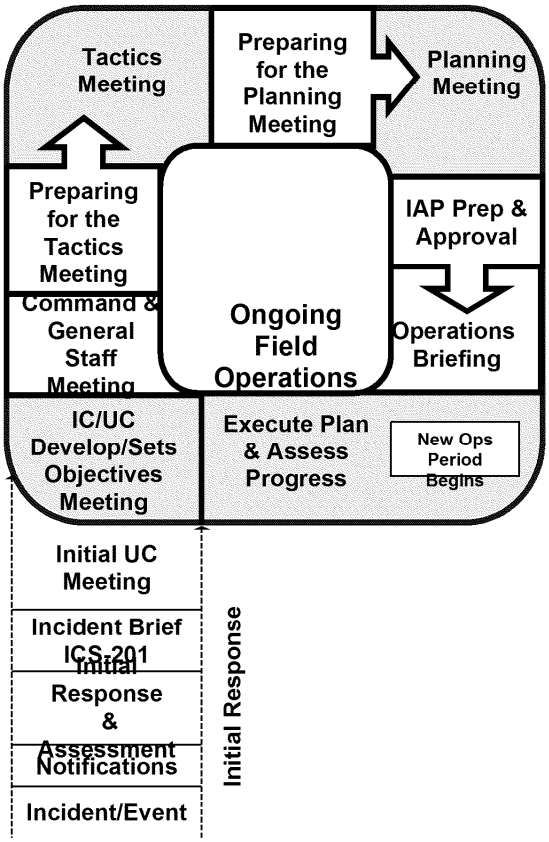

General Tasks

Incident Command

- Ensure all of Command's direction, priorities and objectives have been met;
- Provide further direction and resolve differences as needed; and
- Give approval of the proposed plan.

Operations

- Provide overview of current OPS; and
- Present plan of action including: strategies, tactics, contingencies, resources, organization structure and overall management considerations (e.g., Divisions/Groups).

Planning

- Facilitate Planning Meeting agenda;
- Brief present situation;
- Provide projections; and
- Address/resolve response coordination issues as needed, and gain consensus.

Logistics

- Brief logistical support and resource ordering status.

Finance/Administration

- Brief administrative and financial status/projections, etc.

Command Staff

- Discuss and resolve any Safety, Liaison, or media considerations and issues.

Agenda:

1. PSC brings meeting to order, conducts roll call, covers ground rules, and reviews agenda.
2. IC/UC provides opening remarks.
3. SITL provides briefing on current situation, weather/sea forecast, and the potential for the incident to expand in scope.
4. PSC reviews Command's incident objectives, priorities, decisions, and direction.
5. OPS provides briefing on current operations followed with an overview on the proposed plan including strategy, tactics/work assignments, resource commitment, contingencies, Operations Section organization structure, and needed support facilities.
6. PSC reviews proposed plan to ensure that Command's direction, priorities, and objectives are met.
7. PSC solicits final input and commitment to the proposed plan from Command and General Staff.
8. PSC requests Command's approval of the plan as presented.
9. PSC issues assignments to appropriate IMT members for developing IAP support documentation along with deadlines.

INCIDENT ACTION PLAN (IAP) PREPARATION AND APPROVAL – Attendees immediately prepare their assignments for the IAP to meet the PSC deadline for assembling the IAP components. The deadline will be early enough to permit timely IC/UC approval and duplication of sufficient copies for the Operations Briefing and for overhead.

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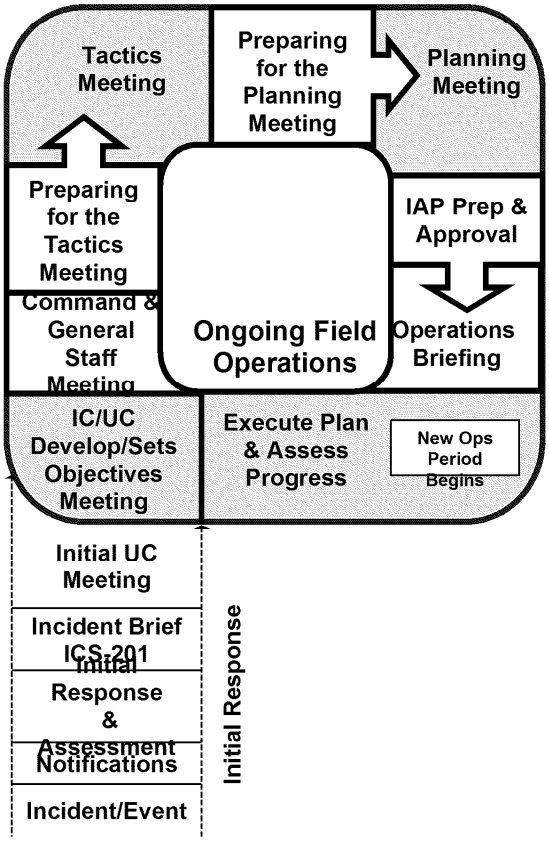
When: Immediately following the Planning Meeting, the PSC assigns the deadline for products.

Facilitator: PSC ensures the process continues between meetings.

Attendees: None. This is not a meeting but a period of time.



General Tasks

Incident Commander (IC/UC)

- Review, approve, and sign IAP.

Operations

- Provide required information for inclusion into IAP;
- Communicate incident status changes; and
- Work with Planning to ensure that ICS 204(s) is/are complete.

Planning

- Facilitate General Staff's IAP input;
- Ensure assignments and expectations are clear;
- Provide completed IAP to IC/UC for review/approval; and
- Distribute completed IAP.

Logistics

- Provide logistics information for IAP; and
- Verify resources ordered.

Finance/Administration

- Verify financial and administrative requirements for IAP.

Components of an IAP (use as pertinent)	Primary Responsibility
1. Incident Objectives (ICS 202 form)	Resource Unit
2. Organization List/Chart (ICS 203/207 forms)	Resource Unit
3. Assignment List (ICS 204 form)	Resource Unit
4. Communication Plan (ICS 205 form)	Communications Unit
5. Medical Plan (ICS 206 form)	Medical Unit
6. Incident Map	Situation Unit
7. Weather, tide forecast	Situation Unit
8. Safety Plan	Safety Officer
9. Decontamination Plan	Technical Specialist
10. Waste Management or Disposal Plan	Technical Specialist
11. Demobilization Plan	Demobilization Unit
12. Air Operations Summary (ICS 220 form)	Air Operations Branch Director
13. Traffic Plan	Ground Support Unit

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OPERATIONS BRIEFING – This 30-minute-or-less briefing presents the IAP to the Operations Section oncoming shift supervisors. After this briefing has occurred and during shift change, outgoing supervisors should be interviewed by their relief and by OPS in order to validate IAP effectiveness. The Division/Group Supervisor may make last minute adjustments to tactics over which they have purview. Similarly, a supervisor may reallocate resources within that Division/Group to adapt to changing conditions.

When: About an hour prior to each shift change.
Facilitator: PSC.
Attendees: IC/UC, Command Staff, General Staff, Branch Directors, Division/Group Supervisors, Task Force/Strike Team Leaders (if possible), Unit Leaders, others as appropriate.

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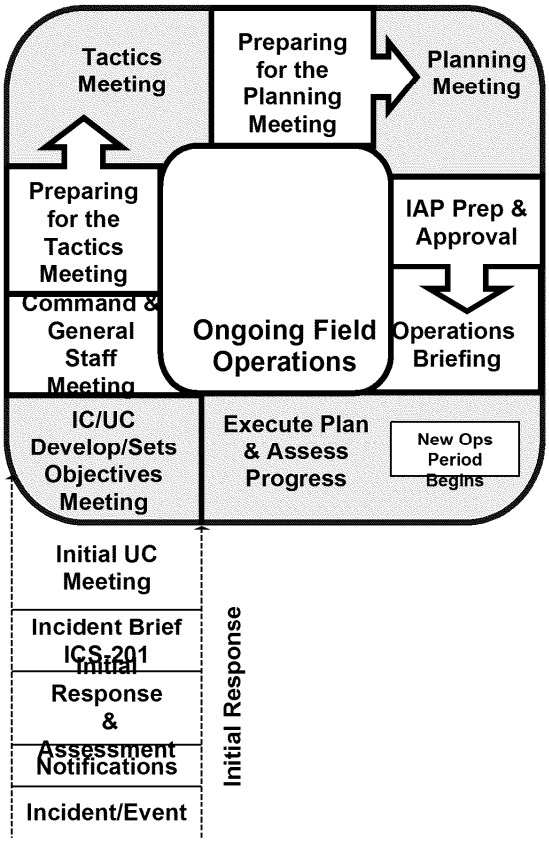

General Tasks

Incident Command (IC/UC)

- Provide guidance/clarification; and
- Provide leadership presence.

Operations

- Provide Operations Briefing for next operational period; and
- Ensure ICS-204 tasking is clear.

Planning

- Set up briefing area;
- Facilitate Command and General Staff and attendees briefing responsibilities; and
- Resolve questions.

Logistics

- Brief any transportation, communication, and supply issues.

Finance/Administration

- Brief administrative issues and provide financial report.

Agenda:

1. PSC opens briefing, covers ground rules and agenda, and takes roll call of Command and General Staff and Operations personnel required to attend.
2. PSC reviews IC/UC incident objectives and changes to the IAP (i.e., pen and ink changes).
3. IC/UC provides remarks.
4. SITL conducts Situation Briefing.
5. OPS discusses current response actions and accomplishments.
6. OPS briefs Operations Section supervisors.
7. LSC covers transport, communications, and supply updates.
8. Finance/Administration Section Chief (FSC) covers fiscal issues.
9. SO covers safety issues, PIO covers public affairs and public information issues, and Liaison Officer (LNO) covers interagency issues.
10. PSC solicits final comments and adjourns briefing.

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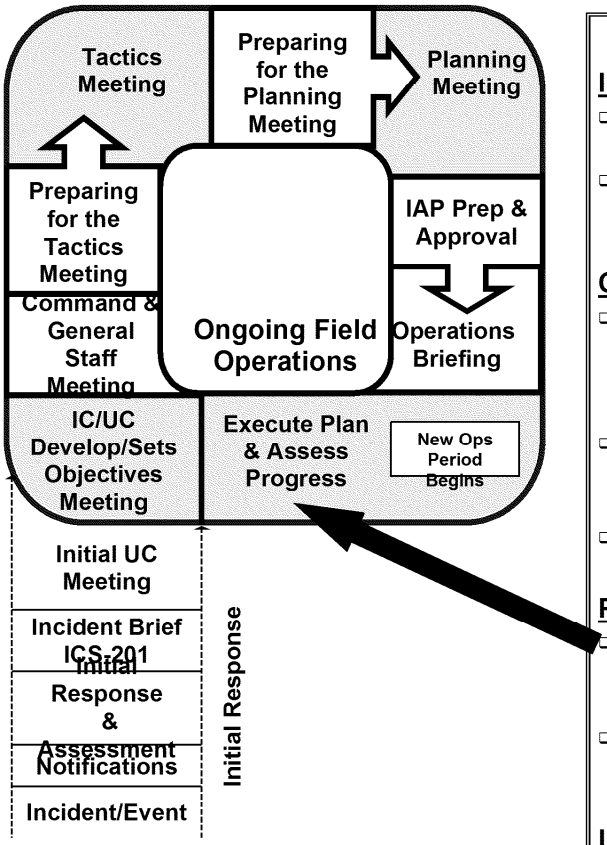

General Tasks

Incident Commander (IC/UC)

- Monitor ongoing incident management activities; and
- Evaluate prior decisions, direction, priorities, and task assignments.

Operations (OPS)

- Monitor ongoing operations and make strategic and tactical changes as necessary;
- Measure/ensure progress against assigned objectives; and
- Brief Command on a scheduled basis.

Planning

- Ensure ongoing operational information is being collected and documented; and
- Develop new/revised incident objectives and provide to IC/UC.

Logistics

- Evaluate logistical support effectiveness and make organizational and procedural adjustments as needed.

Finance/Administration

- Monitor ongoing operations to ensure accurate and timely administrative and financial reporting.

Safety Officer

- Monitor ongoing operations and correct unsafe practices; and
- Evaluate effectiveness of the HASP.

ASSESS PROGRESS – Assessment is an ongoing, continuous process to help adjust current operations and help plan for future operations. Following the briefing and shift change, all Command and General Staff Section Chiefs will review the incident response progress and make recommendations to the IC/UC in preparation for the next IC/UC Objectives Meeting. The IC/UC should maintain close coordination with the Regional Incident Coordinator (RIC) for situational updates. This feedback/information is continuously gathered from various sources, including Field Observers (FOBS), responder debriefs, and stakeholders (tools may include Situation Report, IAP, WebEOC). IC/UC should encourage Command and General Staff to get out of the ICP to view firsthand the areas of the incident they are supporting.

SPECIAL PURPOSE MEETINGS

The Special Purpose Meetings are most applicable to larger incidents requiring an Operational Period Planning Cycle, but may be useful during Initial Response and Assessment.

BUSINESS MANAGEMENT MEETING – This under-30-minute meeting develops and updates the operating plan for finance and logistical support. The agenda could include: documentation issues, cost sharing, cost analysis, finance requirements, resource procurement, and financial summary data. Attendees normally include: FSC, Cost Unit Leader (COST), LSC, SITL, and RESL.

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AGENCY REPRESENTATIVE MEETING – This meeting is held to update Agency Representatives and ensure that they can support the IAP. It is conducted by the LNO, and attended by Agency Representatives. It is most appropriately held after the Planning Meeting in order to announce plans for the next operational period. It allows for minor changes should the plan not meet the expectations of the Agency Representatives.

MEDIA BRIEFING – This meeting briefs media and the public on the most current and accurate facts. It is set up and moderated by the PIO, and features selected spokespersons. This brief must be held away from the ICP, and is normally conducted at a Joint Information Center (JIC). Spokespersons should be prepared by the PIO to address anticipated issues. The briefing should be well-planned, organized, and scheduled to meet the media's needs.

TECHNICAL SPECIALIST MEETING – Meetings may be held to gather technical specialist input to the IAP. As an example, the Environmental Unit Leader (ENVL) may call together technical specialists to review proposed tactics for the IAP.

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CHAPTER 5

RESOURCE ORDERING, INCIDENT SITUATION DISPLAYS, AND FORMS

RESOURCE REQUEST AND ORDERING PROCESS

The acquisition process begins by submission of Incident Command System (ICS) Form 213-RR-EPA requesting equipment or personnel. This request form can be used for tactical equipment (booms, vacuum trucks, frac tanks, etc.), non-tactical resources (trailer, crush and run, ice, etc.) or personnel (Scientific Support Coordinator, Field Observer, statistician, etc.). The form must be approved by a member of Command or General Staff. The Resource Unit is responsible for maintaining the status of all assigned **tactical** resources at a response. The Logistics Section Chief (LSC) will work with the impacted region, backup regions, special teams, and EPA Headquarters (HQ) to determine if the resource can be provided from within the Agency or Unified Command (UC) if established. If the resource cannot be obtained within the Agency or UC, the LSC will forward the ICS 213-RR-EPA form to the Finance/Administration Section Chief (FSC) to initiate the procurement process.

This process is managed by maintaining a status-keeping system indicating the current location and status of all resources. This can be a daunting task, so developing a system early, briefing incoming personnel on the resource request and ordering process, and maintaining the appropriate forms is essential. The use of purchase cards and executing warrant authority outside the requisition ordering process makes it very difficult to track assets

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during the response and to account for assets following the incident, when the audit by the Office of the Inspector General (OIG) usually begins.

The Incident Commander (IC) must make it clear that the Resource Unit, Logistics Section, and Finance/ Administration Section are the primary mechanisms for obtaining equipment or personnel during a large response. Under no circumstances is this process intended to slow the pace of the response. If the requisition process does not meet the needs of response personnel, the IC should be notified immediately. At that time, the IC may direct an On-Scene Coordinator (OSC) to utilize his/her purchase card or warrant authority to prevent damage to the environment or risk impacting human health. Additional information can be found in the Resource Unit Leader (RESL) Job Aid, the Logistics Section Chief (LSC) Job Aid, and the Finance/Administration Section Chief (FSC) Job Aid.

INCIDENT SITUATION DISPLAY

The collection and display of information about an incident and the nature and status of response operations is a critical aspect of establishing and maintaining a command and control environment, and promotes effective and efficient communications. Ideally, pre-designated status boards and/or video projection screens should be used for display to ensure that critical information is captured and presented in a clear and logical fashion.
Status boards and video display that depict information that is of use to two or more Sections in an Incident Command Post (ICP) should be grouped together in an area called the Incident Situation Display. The incident Situation

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Display should be viewed as the one place in an ICP where anyone can go, at any time, to learn about the nature and status of an incident and response operations.

Status boards in the Incident Situation Display should be limited in number and should be displayed in an ordered fashion to ensure that they impart an integrated and coherent message concerning: (1) the incident (e.g., nature, location and extent of the incident, status of resources, type and quantity of resources, and the environmental conditions affecting the response); and (2) the nature and status of response operations to address the incident. Figure 5-1 presents an example of an Incident Situation Display layout that is consistent with a left to right viewing.

An Incident Situation Display should be established and maintained by the Situation Unit Leader (SITL) and RESL. It should be situated in a highly visible and easily accessible location, in close proximity to the Planning Section and easily accessible to the Operations Section. Since the ICP is an active area, the Incident Situation Display should be located away from areas subject to heavy foot traffic.

Although an Incident Situation Display is established and maintained by personnel in the Planning Section, it belongs to everyone in the ICS. To the extent that the Incident Situation Display contains information about activities underway in other Sections, it is the obligation of appropriate personnel in those Sections to work with the Planning Section to ensure information posted in the Incident Situation Display is accurate and up-to-date. It is likewise the responsibility of the status board monitors

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within the Situation Unit to seek out sources and establish paths and schedules for needed information.

As time allows, black-and-white, 8” by 11” versions of the status board information should be prepared. These documents should be time-stamped and distributed within ICS and remotely, and copies should be made available at the Incident Situation Display.

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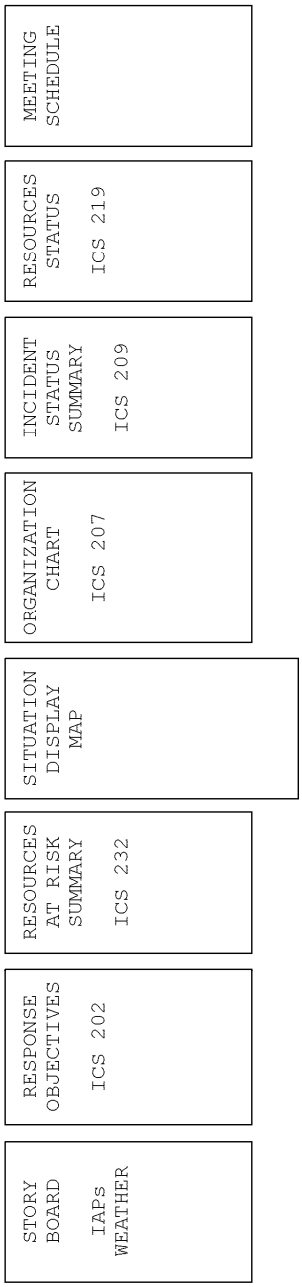
This is an example of status boards for Incident Situation Display, for planning purposes only.

FIGURE 5-1: INCIDENT SITUATION DISPLAY



ICS FORMS

To assist with information management during response activities, responders at all levels should make the best use of the most applicable ICS forms. The National Wildfire Coordinating Group (NWCG) forms are the longstanding conventional ICS forms that are most commonly used throughout the emergency services community and are designed based upon firefighting operations (e.g., ICS 215 form tracks pumpers, bulldozers, and other firefighting apparatuses). United States Coast Guard (USCG)-modified forms have been prepared to align more closely with oil spill response operations (e.g., ICS 215-CG form tracks oil skimmers, vacuum trucks, and other oil spill response equipment). The EPA-modified forms have been prepared to track resources associated with conventional Superfund removal operations (e.g., ICS 215-EPA form tracks equipment operator, cleanup technician, chemist, etc.). Depending on the nature of an incident, any of these may be most suitable to the event. If working within a Unified Command, or assisting with another agency's Incident Management Team (IMT), responders may also encounter the use of other modified forms which are also suitable for the event.

The forms listed in this section are identified as reference only. Each of the forms listed below is available on epaosc.org under "Forms and Boilerplate documents". The following website links directly to the ICS forms page:

https://www.epaosc.org/main/forms_docs.aspx

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EPA-MODIFIED ICS FORMS

ICS FORMS	FORM TITLE	EDITION DATE
ICS-201-EPA	Incident Briefing	January 2011
ICS-202-EPA	Incident Objectives	January 2011
ICS-203-EPA	Organization Assignment List	January 2011
ICS-204-EPA	Division Assignment List	January 2011
ICS-204a-EPA	Assignment List	January 2011
ICS-205-EPA	Radio Communications Plan	January 2011
ICS-205a-EPA	Incident Communications Plan	January 2011
ICS-206-EPA	Medical Plan	January 2011
ICS-207-EPA	Incident Organization Chart	January 2011
ICS-208HM-EPA	Hazardous Materials Site Safety and Control Plan	July 2014
ICS-210-EPA	Status Change	January 2011
ICS-211-EPA	Check-In List	January 2011
ICS-211e-EPA	Equipment Sign-In	January 2011
ICS-213-EPA	General Message	January 2011
ICS-213-RR-EPA	Resource Request Form	January 2011
ICS-214-EPA	Unit Log	January 2011
ICS-215-EPA	Operational Planning Worksheet	January 2011
ICS-215a-EPA	Incident Action Plan Safety Analysis	January 2011
ICS-218-EPA	Support Vehicle Inventory	January 2011
ICS-221-EPA	Demobilization Plan	January 2011
ICS-230-EPA	Meeting Agenda	January 2011
ICS-231-EPA	Meeting Summary	January 2011
ICS-234-EPA	Work Analysis Matrix	January 2011

CHAPTER 6

ENVIRONMENTAL DATA MANAGEMENT

Environmental data management is a crucial area of environmental response. It is the basis for meaningful risk communication with the public and other first responders. Environmental data is managed in the Planning Section of ICS, preferably in an Environmental Unit, given span of control and other organizational issues as determined by the Incident Commander (IC). This chapter is largely about the operations and processes of the Environmental Unit in managing environmental data. The responsibilities of technical specialists within the Environmental Unit can be found in Chapter 9 – Planning Section.

The National Incident Management System (NIMS) discusses the establishment of an Environmental Unit within the Planning Section to facilitate interagency environmental data management, monitoring, sampling, analysis, and assessment. It is expected that most, if not all EPA responses will include the establishment of an Environmental Unit within the Planning Section. It should be noted however, that some of the functions of an Environmental Unit may be assigned to a Technical Working Group (TWG), established either within the Planning Section or in Command Staff reporting directly to the Incident Commander.

The Environmental Unit is responsible for scientific support associated with a response, including the following:

- Support for response approaches including technologies;

- Modeling and data interpretation;
- Natural resources and ecological issues;
- Establishment of standard methods and permitting issues;
- Sampling and Analysis Plans; and
- Quality Assurance and Control Plans.

Personnel assigned to the Environmental Unit may include technical specialists in sampling and analytical methods, site response technologies, data management, hazardous material characterization, risk assessment, stabilization, site characterization, decontamination, cleanup, and waste management. The Environmental Unit, which is located in the Planning Section, conducts the following activities: participates in developing sampling and analysis plans; receives field data from the Operations Section from laboratory support; verifies, interprets, and manages the data; and advises the IC and Command Staff on findings, data gaps, and precautionary measures.

The Environmental Unit may be comprised of Agency Representatives, private industry, and academia. It is anticipated that the Environmental Unit will coordinate with other Federal assets that generate and interpret data, such as the Federal Radiological Monitoring and Assessment Center (FRMAC), the Interagency Modeling and Atmospheric Assessment Center (IMAAC), National Atmospheric and Oceanic Administration (NOAA), United States Fish and Wildlife Service (USFWS), and the United States Fire Administration (USFA). Additionally, a Science Unit or TWG may be established during the response to address emerging issues (such as dispersant use during the Deep Water Horizon response) and to ensure technical

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and stakeholder outreach.

During a Nationally Significant Incident, an additional Headquarters (HQ) Environmental Unit will be established in the HQ Emergency Operations Center (EOC). The function of the HQ Environmental Unit is to support field operations by providing additional data quality control, coordinating with outside groups such as the Science Advisory Board, working with the Office of Public Affairs (OPA) to craft incident-specific information for the media, and providing risk assessments for the general public. The HQ Environmental Unit should work in close coordination with the field Environmental Unit and the Scientific Support Coordinator (SSC) in Command Staff. The purpose of the HQ Environmental Unit is to coordinate with and support the field Environmental Unit through the following activities:

- External coordination with national political leadership and other Federal (including ATSDR, USACE) and state agencies (via support from the regions);
- Internal coordination with other EPA offices, including the Office of the Administrator, the Office of General Counsel, the Office of External Affairs and Environmental Education, the Office of Air and Radiation, the Office of Water, the Office of Enforcement and Compliance Assurance, and other appropriate offices;
- Analytical data management review and interpretation;
- Quality Assurance;
- Hazard or Risk Assessments;
- Coordinating technical issues with various regions such as debris management;
- Dissemination of information to the public and the

media; and

- Ensuring information technology systems are in place for posting data on the web and providing geographic information systems (GIS) support.

ADDITIONAL RESPONSIBILITIES OF THE ENVIRONMENTAL UNIT

The Environmental Unit may have additional responsibilities, depending on the incident, including, but not limited to:

- Using the appropriate technical approach to make recommendations regarding the protection of public health, welfare, and the environment;
- Developing plans to assess special environmental conditions or impacts related to an incident, and evaluating strategies to minimize those impacts;
- Evaluating data collected for usability, and communicating the information to the rest of the Incident Management Team (IMT) as needed.
- Using models that are relevant to the specific conditions of the incident, and communicating the limitations and assumptions associated with models to the Planning Section Chief (PSC) and stakeholders.
- Performing short-term and long-term risk assessment, as appropriate, to determine action and cleanup levels.
- Assessing the environmental conditions or impacts related to an incident and developing strategies to minimize those impacts.

An example of a *possible* Environmental Unit structure is depicted in Figure 6-1.

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OPERATIONS SECTION AND PLANNING SECTION INTEROPERABILITY

The sharing of information and technical assistance should be commonplace among the Command and General Staff, as depicted in Figure 6-2. Coordination *must* occur between Operations Section and Planning Section personnel in order to develop the technical/tactical elements of the response action.

The responsibility for the development of plans is shared by the Operations Section and Planning Section. Strategic planning is the responsibility of the Planning Section. Tactical planning and implementation is the responsibility of the Operations Section. The Environmental Unit will provide technical expertise to the Operations Section to ensure that the technical approach in the specified operational period is effective. (Note: If established, this should be in consultation with any TWGs or the SSC.) The Environmental Unit will assist the incident command through the development of sampling plans, data analysis and interpretation, development of environmental models, and technology evaluation.

In some cases technical specialists may be assigned to and stay with a Division/Group in the Operations Section. For example, an Air Monitoring Specialist is needed to support multiple Groups performing air monitoring in the Operations Section, and he/she is also needed to evaluate data coming into the Situation Unit or Environmental Unit. Since the technical specialist is critical to the implementation of an operation, he/she would be assigned to the Operations Section.

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It is extremely important that Environmental Unit deliverables/products are passed through the Environmental Unit Leader (ENVL) and PSC to the Incident Commander/Unified Command (IC/UC) prior to dissemination, use, or implementation. It is critical that the ENVL coordinate all facets of the Unit's mission and the various agencies' and organizations' interests, concerns, and technical expertise with the PSC, Command Staff, and IC/UC as a recommendation, opinion or proposed action plan. When an Environmental Unit is established at HQ, deliverables/products need to be coordinated with the HQ Environmental Unit before being finalized and sent to the PSC in the IMT.

TECHNICAL SPECIALISTS WITHIN THE ENVIRONMENTAL UNIT

The Environmental Unit, if the specific incident warrants, could address multiple technical issues or functions to properly support the Incident/Unified Command. Only those technical functions needed for a specific response should be incorporated into the Environmental Unit.

Examples of technical specialists include:

- Analytical Coordinator
- Quality Assurance Coordinator
- Laboratory Coordinator
- Sampling and Monitoring Plan Coordinator
- Modeling Analysis Coordinator
- Data Management Specialist
- Data Assessment and Interpretation Coordinator
- Data Assessment Interpreter

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- Ecological Assessment Coordinator
- Health Assessment Coordinator
- Response Technology Specialists (may include):
  - Oil Spill Technical Specialist
  - Technical Specialists in Chemical and Biological Agents
  - Radiological Technical Specialist

The major responsibilities of technical specialists may include:

a. Scientific support for specific response
   - Decontamination
   - Site characterization
   - Waste management
   - Cleanup, removal, and remediation
   - Chemical, biological, radiological or nuclear (CBRN) agents and/or other specific pollutant expertise
   - Development of site cleanup and hazardous materials waste management plans

b. Modeling
   - Air, ground water, surface water
   - Discharge from a point source
   - Oil trajectory
   - Contaminant fate and transport

c. Natural Resources and Ecological Issues
   - Environmental impacts (e.g., seafood tainting, wildlife impacts)
   - Identification of natural resources (e.g., wildlife, habitats, sanctuaries, and refuge areas)
   - Endangered Species Act (ESA)
   - Historic and cultural resources

- Wildlife protection strategies

d. Analytical Issues
   - Sampling and analytical plans
   - Coordination of analytical work
   - Coordination and/or identification and use of laboratory resources

e. Quality Assurance

f. Data Management
   - Identify and consolidate all data streams
   - Develop Federal Data Reporting Requirements
   - Support the IMT by providing technical and policy guidance on data issues
   - Mobilize and manage a dedicated Federal Data Management Unit

g. Data and Interpretation
   - Data assessment and interpretation
   - Risk assessment and toxicology
   - Participate in the determination of the extent of site contamination

h. Health Assessment
   - Coordinate assessment with Centers for Disease Control and Prevention (CDC) and Agency for Toxic Substances and Disease Registry (ATSDR), and other appropriate Federal, state, or local health agencies

LONG-TERM PLANNING, SCIENCE, AND AREA COMMAND COORDINATION

Actions identified during the emergency response phase should be addressed and documented as the response progresses to ensure that information and data are not lost during the transition. The identified actions will transition to

another program. If an Area Command (AC) is established, it is anticipated that the AC would support much of the non-field functional science and technical work (see Chapter 13 – Area Command for the role of the AC Environmental Unit). Area Command, if established, should be able to assist in identifying the programs that would have jurisdiction over specific aspects of the incident following the initial response action (e.g., the water program, remedial program, or air program).

The Office of Emergency Management (OEM) has established and maintains the **Environmental Response Laboratory Network (ERLN)** to provide national environmental laboratory analytical capabilities and capacities necessary for effective and timely response to environmental contamination resulting from a natural disaster, a terrorist attack, a national threat event associated with CBRN agents, or other Nationally Significant Incidents. The ERLN builds upon existing networks and infrastructure, and is developing testing capability and capacity to meet EPA's responsibilities for surveillance, response, and recovery from incidents involving CBRN agents. OEM coordinates with other EPA programs and laboratories as well as works with other Federal or state agencies to leverage resources and develop necessary laboratory capacity to meet the nation's needs for environmental analyses associated with a nationally significant incident or a CBRN event. As such, OEM should be contacted prior to contacting or obtaining laboratory services from these other providers such as the Laboratory Response Network (LRN) or the Food Emergency Response Network (FERN).The ERLN can be contacted through the HQ EOC or HQ Environmental Unit, if established.

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FIGURE 6-1: EXAMPLE OF AN ENVIRONMENTAL UNIT IN INCIDENT/UNIFIED COMMAND

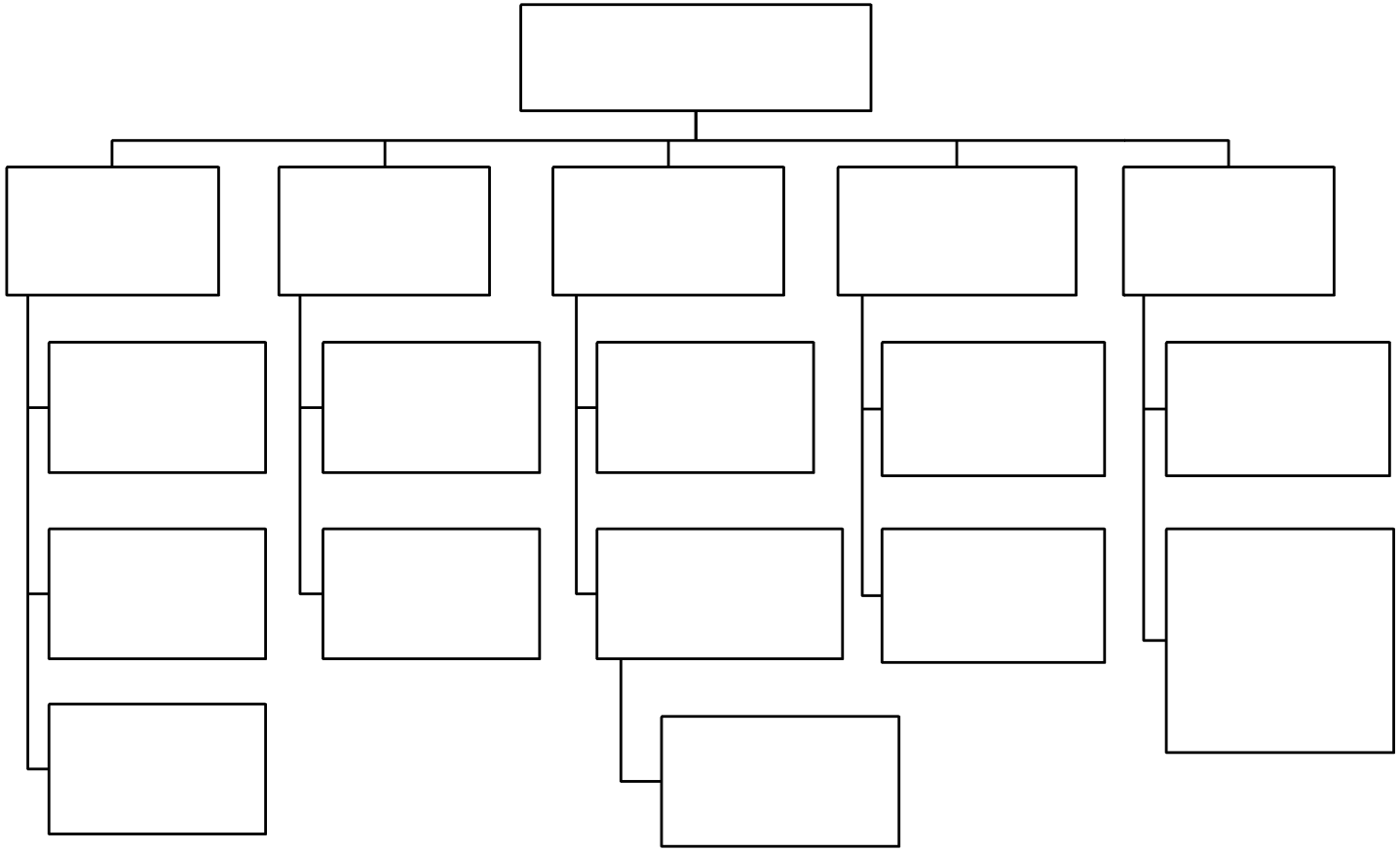

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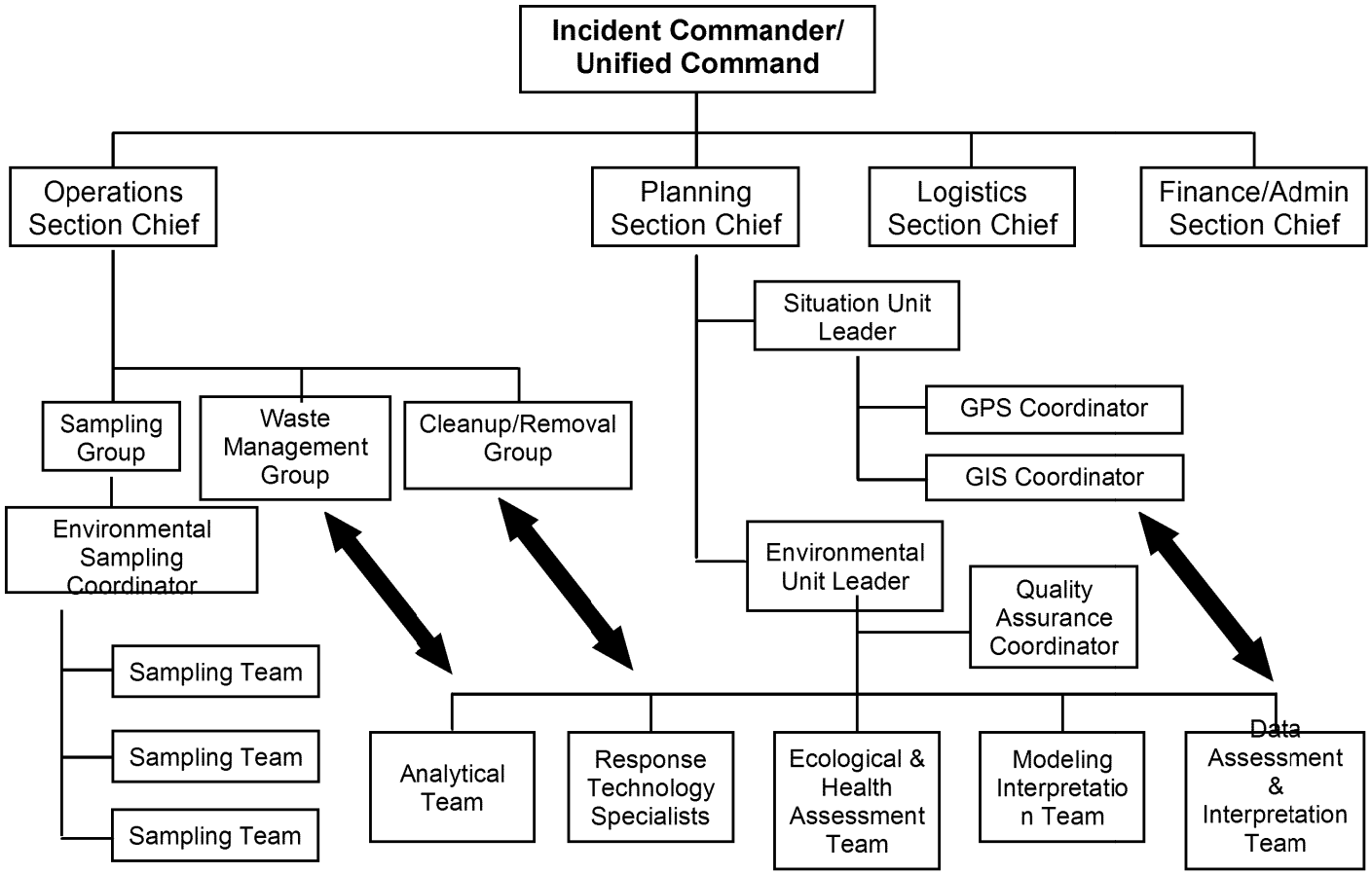
FIGURE 6-2: ENVIRONMENTAL UNIT'S RELATIONSHIP WITH OTHER INCIDENT COMMAND FUNCTIONS



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CHAPTER 7

COMMAND STAFF

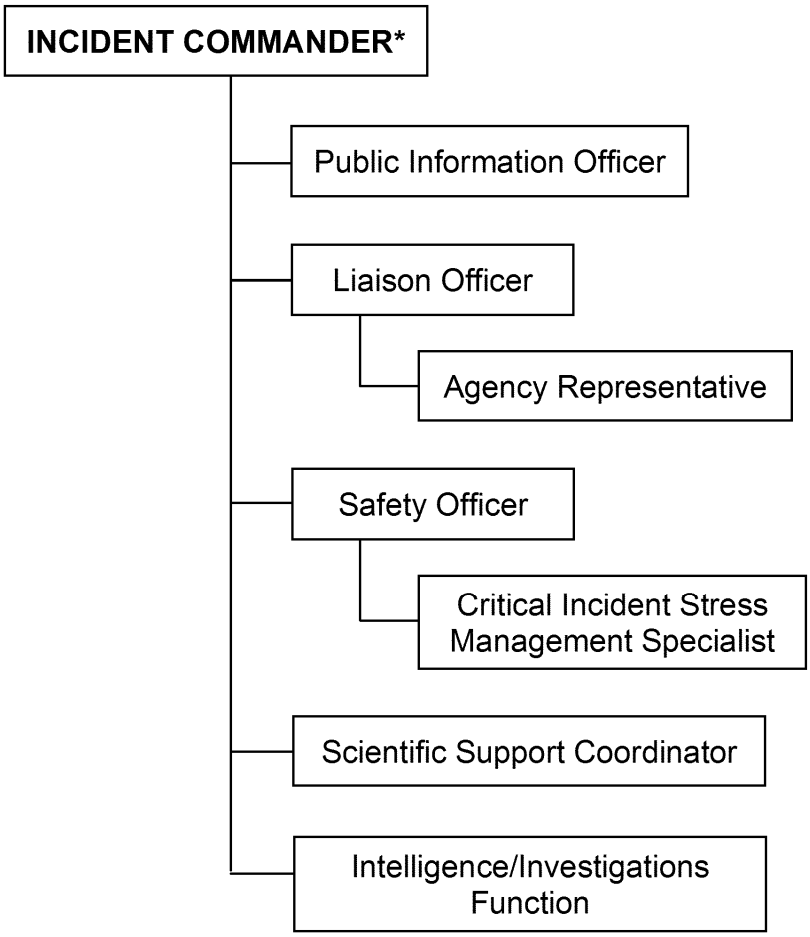

Figure 7-1: Command Staff Organization Chart

*If additional command staff positions are established by the IC, a deputy IC position should also be established to assist with maintaining an effective span of control.

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POSITION CHECKLISTS

INCIDENT COMMANDER (IC) – The IC is responsible for overall incident management. In many incidents, the command activity is carried out by a single IC. For EPA the IC is normally the lead On-Scene Coordinator (OSC) assigned to the response. Although there are numerous OSCs filling critical positions within the Incident Management Team (IMT), the lead OSC, by regulation, is responsible for the overall management of the incident. The IC determines the incident objectives and coordinates with the Regional Incident Coordinator (RIC) to implement management objectives. However, senior leadership will play a role during a large-scale response.

The IC may have one or more deputies, who may be from the same agency or from an assisting agency. Deputies may also be used at Section and Branch levels of the Incident Command System (ICS) organization. Deputies must have the same qualifications as the person for whom they work, as they must be ready to take over that position at any time. The major responsibilities of the IC are:

a. Review Common Responsibilities (page 3-1);
b. Assess the situation and/or obtain a briefing from the prior IC and RIC;
c. Set incident objectives, which are established to effectively meet the mission and priorities established by the Agency (as communicated through the RIC). This is done in concert with response partners at the Initial Unified Command (UC) Meeting and may be revised at subsequent IC/UC Objectives Meetings as time moves forward;
d. Ensure adequate resources are devoted to Liaison

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staff to assure that Environmental Justice and tribal issues receive appropriate attention;

e. Establish the immediate priorities;

f. Establish an Incident Command Post (ICP);

g. Establish an appropriate organizational structure to achieve management and incident objectives;

h. Ensure Planning Meetings are scheduled as required;

i. Approve and authorize the implementation of the Incident Action Plan (IAP);

j. Ensure that adequate safety measures are in place, including a Health and Safety Plan (HASP);

k. Coordinate activity for all Command and General Staff;

l. Coordinate with key people and officials;

m. Approve requests for additional resources or for the release of resources;

n. Maintain clear and effective communications and information sharing with the RIC;

o. In coordination with the Public Information Officer (PIO), the Headquarters (HQ) PIO Unit (if established) and the Office of Public Affairs (OPA), authorize release of information to the news media;

p. Ensure Incident Status Summary (ICS 209 form and/or Situation Report) is completed and forwarded to appropriate authority;

q. Order the demobilization of the incident when appropriate;

r. Monitor the operation and effectiveness of the ICS

organization; and

s. Maintain Unit/Activity Log (ICS 214 form).

PUBLIC INFORMATION OFFICER (PIO) – The PIO is responsible for developing and releasing (upon approval by the IC and in coordination with the HQ OPA) information about the incident to the news media and the public. Only one PIO will be assigned for each incident command, including incidents operating under UC. The PIO may designate Assistant PIOs to carry out the various information needs of the response. The assistants may also originate from assisting agencies or jurisdictions.

For Nationally Significant Incidents, the role of the HQ Emergency Operations Center (EOC) PIO comes into play. The HQ EOC PIO becomes responsible for coordinating closely with the PIOs in the region(s) and field IMT(s), developing and releasing information about the incident to the news media, ensuring that information gets posted on the EPA public internet site, and ensuring compliance with the National Approach to Response (NAR) Crisis Communications Plan.

The PIO has the following specific responsibilities:

a. Review Common Responsibilities (page 3-1);
b. Coordinate with OPA when required under the Crisis Communications Plan;
c. Gather incident data;
d. Determine, in consultation with the IC and OPA, if there are any limits on information release;
e. Develop material for use in media briefings;
f. Obtain IC's approval of media releases;

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g. Conduct media briefings;
h. Arrange for tours and other interviews or briefings that may be required;
i. Obtain media information that may be useful to incident planning;
j. Maintain current information summaries on the incident and provide information on status of incident to assigned personnel;
k. Analyze public perceptions of the response;
l. Establish Emergency Support Function (ESF) #10 Joint Information Center (JIC) or coordinate with an established JIC to consolidate public information officials from multiple jurisdictions;
m. Provide for security of information when necessary;
n. Develop and implement community relations programs;
o. Ensure that community relations activities are effectively coordinated with other Command and General Staff functions. This includes outreach, in coordination with the Command Staff Liaison Officer (LNO), to vulnerable populations during the course of the response in collaboration with regional Environmental Justice and tribal offices;
p. Ensure the community input feedback and issues are effectively coordinated with the LNO; and
q. Maintain Unit/Activity Log (ICS 214 form).

The PIO may designate assistants to perform subsets of these responsibilities, as shown in Figure 7-2.

Figure 7-2: Public Information Personnel Organizational Structure

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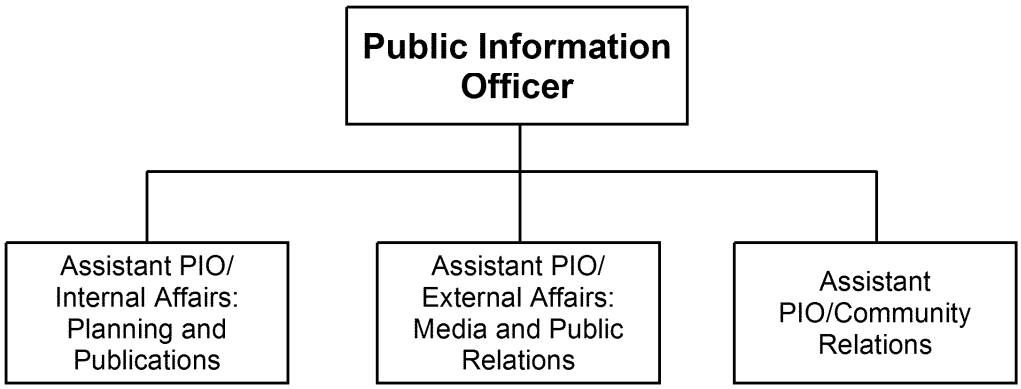

LIAISON OFFICER (LNO) – Incidents that are multijurisdictional, or that have several agencies involved, may require the establishment of the LNO position on the Command Staff. Only one LNO will be assigned for each incident, including incidents operating under Unified Command and multijurisdictional incidents. The LNO may have assistants as necessary, and the assistants may also represent assisting agencies or jurisdictions.

The LNO is the point of contact for personnel assigned to the incident by assisting or cooperating agencies. These are personnel other than those on direct tactical assignments or those involved in a UC. The major responsibilities of the LNO are:

a. Review Common Responsibilities (page 3-1);
b. Be a contact point for Agency Representatives;
c. If applicable, coordinate with EPA representative at the Joint Field Office (JFO);
d. Maintain a list of assisting and cooperating agencies and Agency Representatives;
e. Establish and coordinate contact with key stakeholders;

f. Assist in establishing and coordinating interagency contacts;
g. Keep agencies supporting the incident aware of incident status;
h. Monitor incident operations to identify current or potential inter-organizational problems;
i. Participate in Planning Meetings and provide current resource status, including limitations and capabilities of assisting agency resources;
j. Maintain log of specific Agency issues and concerns;
k. Coordinate Congressional Inquiries with EPA's Office of Congressional and Intergovernmental Relations;
l. Brief Command on Agency issues and concerns;
m. Ensure Environmental Justice issues are addressed in a timely manner and briefed to the IC as necessary;
n. Coordinate volunteer activity. Work closely with the Volunteer Coordinator (VOLC) position (if established) and/or the Corporation for National and Community Service (CNCS) if used to manage volunteers;
o. Coordinate frequently regarding Environmental Justice issues and outreach to vulnerable populations with the Command Staff PIO, who has responsibility for community outreach activities;
p. Coordinate with the PIO with respect to public information needs (e.g., VIP visits, specific information requests);
q. Ensure community concerns are addressed in a

timely manner and brief to the IC as necessary; and

r. Maintain Unit/Activity Log (ICS 214 form).

AGENCY REPRESENTATIVE – In many multijurisdictional incidents, an agency or jurisdiction may send a representative who is not on direct tactical assignment, but rather is present to assist in coordination efforts. An Agency Representative is an individual assigned to an incident from an assisting or cooperating agency, who has been delegated authority to make decisions on matters affecting that agency's participation at the incident.

Agency Representatives report to the LNO, or to the IC in the absence of an LNO. The major responsibilities of the Agency Representatives are:

a. Review Common Responsibilities (page 3-1);
b. Report to the LNO at the ICP after check-in;
c. Ensure that all agency resources are properly checked in at the incident;
d. Obtain briefing from the LNO or IC;
e. Inform assisting or cooperating agency personnel assigned to the incident that the Agency Representative position for that agency has been filled;
f. Attend briefings and Planning Meetings as required;
g. Provide input on the use of agency resources unless resource technical specialists are assigned from the agency;
h. Cooperate fully with the IC and the General Staff on agency involvement at the incident;

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i. Ensure the well-being of agency personnel assigned to the incident;
j. Advise the LNO of any special agency needs or requirements;
k. Report to home agency dispatch or headquarters on a prearranged schedule;
l. Ensure that all agency personnel and equipment are properly accounted for and released prior to departure;
m. Ensure that all required agency forms, reports and documents are completed prior to demobilization;
n. Have a debriefing session with the LNO or IC before demobilization; and
o. Maintain Unit/Activity Log (ICS 214 form).

SAFETY OFFICER (SO) – The SO is responsible for the overall safety of the incident within the scope of the IMT. The SO's function is to develop and recommend measures for ensuring personnel safety, and to assess and anticipate hazardous and unsafe situations.
On an EPA incident, there will always be an EPA SO assigned. Only one SO will be designated for each incident. The SO may have Assistant Safety Officers (ASOs) as necessary. The ASOs may be from assisting agencies or jurisdictions. The ASO may have specific responsibilities such as assisting with air monitoring or hazardous materials staging. The ASO may be assigned by the SO to a Group or to a Division to support a specific function. The major responsibilities of the SO are:

a. Review Common Responsibilities (page 3-1);
b. Participate in meetings as required;
c. Review and approve 1910.120-compliant HASP;

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d. Identify hazardous situations associated with the incident;
e. Provide safety message at Operations Briefing and conduct safety briefings in the field;
f. Exercise emergency authority to prevent or stop unsafe acts;
g. Investigate accidents that have occurred within the incident area;
h. Assign ASOs as needed;
i. Review and approve the medical plan;
j. Develop Hazardous Materials Site Safety & Control Plan (ICS 208-HM form) or equivalent;
k. If applicable, ensure contractors' safety plans are consistent with the 1910.120-compliant HASP;
l. Review site-specific Decontamination Plan;
m. Ensure medical monitoring for work in the Exclusion Zone;
n. Conduct safety briefings;
o. Work closely with the Operations Section Chief (OPS) to develop the Safety Analysis of Tactical Applications (ICS 215a-EPA form) and transfer relevant information to Special Instructions box on ICS 204 form;
p. Interface with the JFO SO and with SOs from the participating Federal, state, local, and tribal government agencies;
q. Inform appropriate Agency Representatives of incidents or accidents requiring follow-up actions for their personnel;
r. Evaluate need for Critical Incident Stress

Management (CISM) and request resources as needed; and

s. Maintain Unit/Activity Log (ICS 214 form).

CRITICAL INCIDENT STRESS MANAGEMENT (CISM) SPECIALIST – The CISM Specialist is responsible for identifying and securing the immediate response and services of sufficient CISM team members necessary to carry out CISM duties to provide for the psychological and emotional needs of all EPA personnel involved in a major incident. The CISM Specialist is the point-of-contact (POC) for all requests for CISM services and is responsible for the appropriate assignments and duties of all CISM team members involved in the evolution. The CISM Specialist's specific tasks are:

a. Review Common Responsibilities (page 3-1);

b. Ensure there is at least one dedicated phone for CISM within the ICP;

c. Ensure all response personnel involved in the response have timely access to CISM team members;

d. Ensure proper listing with the ICP of all CISM team members and their necessary contact phone numbers while assigned in the area;

e. Coordinate CISM team access;

f. Establish and maintain working relationship with chaplain services (if available during a response) to cross reference needs of responders and their families;

g. Provide EPA responder family members (spouses, children, and significant others) with access to

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CISM members;

h. Attend all staff briefings and Planning Meetings as required;

i. Ensure adequate number of CISM team members present at all times to allow for rest, exercise, and proper rotation of CISM personnel;

j. Ensure CISM team members are adequately debriefed following their involvement with CISM response;

k. Establish communication and working relationships with all other responding agencies providing mental health assistance, especially the Red Cross, Salvation Army, and other agency support personnel;

l. Maintain liaison with the other local response agencies to effectively refer appropriate non-EPA personnel for health assistance;

m. Maintain an accurate daily log of all activities, including dates, times, and places where CISM activities occurred; and

n. Maintain Unit/Activity Log (ICS 214 form).

SCIENTIFIC SUPPORT COORDINATOR (SSC) – The SSC is a technical specialist and is defined in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) 300.145 as the principal advisor to the IC for scientific issues. The SSC is charged with gaining consensus on scientific issues affecting the response, but also ensuring that differing opinions within the scientific community are communicated to the IC. Tasks include:

a. Review Common Responsibilities (page 3-1);

b. Attend Planning Meetings;
c. Determine resource needs;
d. Gain consensus on scientific issues affecting the response which should include Technical Working Groups, the Environmental Unit, the JFO, etc.;
e. Coordinate with the Operations Section and the Environmental Unit;
f. Act as the lead for external scientific workgroups;
g. Coordinate and communicate with the scientific community;
h. Assist Operations Section and Planning Section in ordering technical specialists needed for the response;
i. Provide enhanced expertise and scientific support in an incident;
j. Convene as needed, chair, and direct Technical Working Groups;
k. Act as liaison to Environmental Clearance committees if established;
l. Have knowledge of and provide access to technical resources available throughout the EPA response community, Special Teams, research community, national laboratories, academia, and contractors;
m. Coordinate expertise from governmental agencies, universities, community representatives, and industry to assist the IC in evaluating the hazards and potential effects of a hazardous release, and in developing response and restoration strategies; and
n. Maintain Unit/Activity Log (ICS 214 form).

INTELLIGENCE/INVESTIGATIONS FUNCTION – The Intelligence/Investigations Function ensures law enforcement investigation activities are coordinated with overall incident management activities. This function may also be under the OPS or Planning Section Chief (PSC). Tasks include:

a. Review Common Responsibilities (page 3-1);
b. Provide the IC with open-source, sensitive, and classified information;
c. Allow IC to integrate Intelligence/Investigations with current response activities;
d. Assist the IC in the determination of whether the incident is a result of criminal acts;
e. Provide the IC with direct links to the Federal Bureau of Investigation (FBI), Joint Operations Center (JOC), or other Multiagency Coordination (MAC) centers;
f. Ensure the IC has access to technical specialists to conduct Intelligence/Investigations operations; and
g. Maintain Unit/Activity Log (ICS 214 form).

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CHAPTER 8

OPERATIONS SECTION

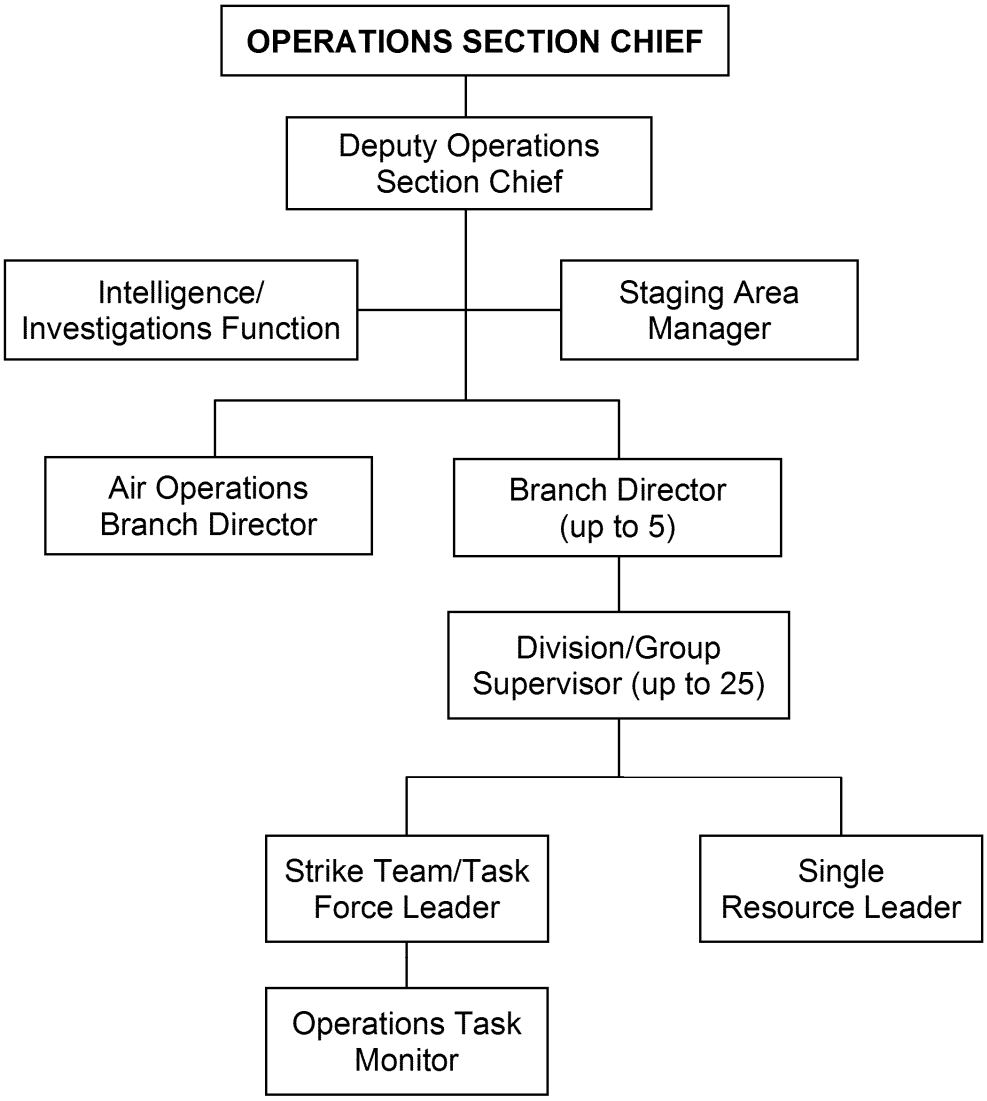

Figure 8-1: Operations Section Organization Chart

OPERATIONS SECTION CHIEF (OPS) – While the

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National Incident Management System (NIMS) acronym for the Operations Section Chief is OSC, EPA refers to this position as OPS to avoid confusion with the acronym for On-Scene Coordinator. The OPS, a member of the General Staff, is responsible for the management of all operations directly applicable to the primary mission. The OPS activates and supervises organizational elements in accordance with the Incident Action Plan (IAP) and directs its execution. The OPS also directs the preparation of Unit operational plans, requests or releases resources, makes expedient changes to the IAP as necessary, and reports such to the Incident Commander (IC). The major responsibilities of the OPS are:

a. Review Common Responsibilities (page 3-1);
b. Conduct operational briefings with operational staff; Develop operations portion of IAP and complete ICS 215 form;
c. Continually communicate and share information with the Planning Section;
d. Recommend operational period length;
e. Determine the need for additional resources and place all resource requests through the Logistics Section;
f. Supervise the Operations Section including assigning and evaluating work;
g. Determine the need for and request additional resources; order through the Logistics Section;

h. Communicate with Resource Unit Leader (RESL) when: the IAP is to be modified; additional resources are needed; surplus resources are

available; or hazardous situations or significant events occur;

i. Review suggested list of resources to be released and initiate recommendation for release of resources;

j. Evaluate on-scene operations and make adjustments to organization, strategies, tactics, and resources as necessary;

k. Assemble and disassemble Strike Teams assigned to the Operations Section;

l. Report information about special activities, events, and occurrences to the IC;

m. Ensure adequate communication between Operations Section and the Environmental Unit within the Planning Section;

n. Convert operational incident objectives into strategic and tactical options through a work analysis matrix (ICS 234-CG form);

o. Plan for demobilization well in advance;

p. Coordinate and confer with the Planning Section Chief (PSC), Safety Officer (SO), and appropriate technical specialists, as well as consult modeling scenarios, spill trajectories, etc., for the selection of appropriate strategies and tactics to accomplish objectives;

q. Identify kind and number of resources required to support selected strategies;

r. Subdivide work areas into manageable units;

s. Develop work assignments, and allocate and prioritize tactical resources based on strategy requirements;

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t. Review and approve ICS 210 form to document changes to personnel and/or equipment;

u. Coordinate planned activities with the SO to ensure compliance with safety practices, including participating in the development of 215a or relevant public safety;

v. Evaluate and monitor current situation for use in next operational period planning;

w. Supervise and adjust Operations Section organization and tactics as necessary;

x. Ensure that consistency and continuity of personnel and practices are developed in each operational Unit; and

y. Maintain Unit/Activity Log (ICS 214 form).

DEPUTY OPERATIONS SECTION CHIEF (DOPS) – The DOPS is as fully qualified as an OPS. The role of the DOPS is flexible. Generally, the DOPS assists the OPS with the management of all tactical operations directly applicable to the primary mission. Specifically, the DOPS may support the OPS:

- In a relief capacity;
- In complex incidents, a DOPS may be specifically assigned to participate in the incident planning process while the OPS supervises on-scene operations; and
- Assist with ordering resources and resource tracking.

The DOPS may be selected from other organizations/ agencies/jurisdictions in a multiagency/multijurisdictional incident. In addition to the OPS responsibilities, the major responsibilities of the DOPS are:

a. Review Common Responsibilities (page 3-1);

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b. Obtain briefing from OPS;
c. Identify resources assigned to the Operations Section;
d. Identify support facilities;
e. Assemble/dissemble Task Forces/Strike Teams;
f. Determine the need for additional resources and place all resource requests through the Logistics Section;
g. Inform RESL when: the IAP is to be modified, additional resources are needed, surplus resources are available, or hazardous situations or significant events occur;
h. Supervise Operations Section field personnel;
i. As directed, provide updates and operational Situation Reports to the OPS on achievements, issues, problems, significant changes, special activities, events, and occurrences;
j. Coordinate with OPS on planning for next operational period;
k. Recommend excess resources for potential demobilization;
l. Debrief with OPS or as directed at the end of each shift; and
m. Maintain Unit/Activity Log (ICS 214 form).

INTELLIGENCE/INVESTIGATIONS FUNCTION – The Intelligence/Investigations Function ensures law enforcement investigation activities are coordinated with overall incident management activities. This function may also be under the Command Staff or PSC. Tasks include:

a. Review Common Responsibilities (page 3-1);
b. Provide the IC/UC with open-source, sensitive, and

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classified information;

c. Allow the IC/UC to integrate Intelligence/Investigations with current response activities;

d. Assist the IC/UC in the determination of whether the incident is a result of criminal acts;

e. Provide IC/UC with direct links to the FBI, Joint Operations Center (JOC), or other Multiagency Coordination (MAC) centers;

f. Ensure the IC/UC have access to technical specialists to conduct Intelligence/Investigations operations; and

g. Maintain Unit/ Activity Log (ICS 214 form).

STAGING AREA MANAGER (STAM) – The STAM is responsible for managing all activities within a Staging Area. The major responsibilities of the STAM are:

a. Review Common Responsibilities (page 3-1);

b. Establish Staging Area layout;

c. Determine any support needs for equipment, feeding, sanitation and security;

d. Establish check-in function as appropriate;

e. Ensure security of staged resources;

f. Post areas for identification and traffic control;

g. Request maintenance service for equipment at Staging Area as appropriate (Note: As established by OPS, this may also include environmental monitoring equipment);

h. Respond to request for resource assignments as directed by OPS;

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i. Obtain and issue receipts for radio equipment and other supplies distributed and received at Staging Area;
j. Determine required resource levels from OPS;
k. Advise OPS when reserve levels reach minimums or recommend potential demobilization as necessary;
l. Maintain and provide status to Resource Unit of all resources in Staging Area;
m. Maintain Staging Area in an orderly condition;
n. Demobilize Staging Area in accordance with the Incident Demobilization Plan; and
o. Maintain Unit/Activity Log (ICS 214 form).

AIR OPERATIONS BRANCH DIRECTOR (AOBD) – The AOBD is ground-based and is primarily responsible for preparing the air operations portion (ICS 220 form) of the IAP and for providing logistical support to incident aircraft. The ICS 220 form serves the same purpose that the ICS 204-EPA form does for other operational resources, by assigning and managing aviation resources on the incident. The AOBD will ensure that agency directives will not be violated by incident aircraft (e.g., flight hours, hoist limitations, night flying). Individual aircrews retain primary responsibility to ensure their aircrafts are operated in accordance with their respective agencies' restrictions and directives. It is also the responsibility of individual aircrews to keep the AOBD informed of their agencies' restrictions and directives that may affect their ability to execute incident assignments. After the IAP is approved, the AOBD is responsible for overseeing the tactical and logistical assignments of the Air Operations Branch. In coordination

with the Logistics Section, the AOBD is responsible for providing logistical support to aircraft operating on the incident. The major responsibilities of the AOBD are:

a. Review Common Responsibilities (page 3-1);
b. Organize preliminary air operations;
c. Develop, implement, and supervise Air Operations Safety Plan;
d. Prepare, brief, and post an Air Operations Safety Plan (which is approved by the SO in the Command Staff and the IC) and the certification of the aircraft;
e. Request declaration (or cancellation) of temporarily restricted air space area (Federal Aviation Administration (FAA) Regulation 91.137);
f. Participate in preparation of the IAP through the OPS. Ensure that the air operations portion of the IAP takes into consideration the Air Traffic Control requirements of assigned aircraft;
g. Perform operational planning for air operations;
h. Prepare and provide Air Operations Summary Worksheet (ICS 220 form) to the Air Support Group and Fixed-Wing Bases;
i. Determine coordination procedures for use by air organization with ground Branches, Divisions, or Groups;
j. Coordinate with appropriate Operations Section personnel;
k. Supervise all air operations activities associated with the incident;

l. Evaluate helibase locations;
m. Establish procedures for emergency reassignment of aircraft;
n. Schedule approved flights of non-incident aircraft in the restricted air space area;
o. Consider requests for non-tactical use of incident aircraft;
p. Resolve conflicts concerning non-incident aircraft;
q. Coordinate with the FAA;
r. Update air operations plans;
s. Report to the OPS on air operations activities;
t. Report special incidents/accidents;
u. Arrange for an Accident Investigation Team when warranted; and
v. Maintain Unit/Activity Log (ICS 214 form).

OPERATIONS BRANCH DIRECTOR (OPBD) – When activated, each OPBD is under the direction of the OPS and is responsible for the implementation of the portion of the IAP appropriate to the Branches. The major responsibilities of the OPBD are:

a. Review Common Responsibilities (page 3-1);
b. Conduct operational briefings with operational staff;
c. Ensure that Division/Group Supervisors have a copy of the IAP;
d. Attend Planning Meetings at the request of the OPS;
e. Assign specific work tasks to Division/Group Supervisors;

f. Supervise Branch operations;
g. Identify the need for additional resources and coordinates with OPS/DOPS on the request;
h. Communicate with OPS and RESL when: the IAP is to be modified, additional resources are needed, surplus resources are available, or hazardous situations or significant events occur;
i. Review and approve ICS 210 form to document changes to personnel and/or equipment;
j. Resolve logistics problems within the Branch;
k. Prepare Branch ICS 215 form, as requested by OPS;
l. Review and approve ICS 210 form to document changes to personnel and/or equipment;
m. Approve accident and medical reports (home agency forms) originating within the Branch;
n. Communicate/coordinate with SO;
o. Plan for demobilization well in advance;
p. Debrief with OPS/DOPS as directed, or at the end of each shift; and
q. Maintain Unit/Activity Log (ICS 214 form).

DIVISION/GROUP SUPERVISOR – The Division/Group Supervisor reports to the OPS (or Branch Director when activated). The Supervisor is responsible for the implementation of the assigned portion of the IAP (as identified in ICS 204-EPA form), assignment of resources within the Division/Group, and reporting on the progress of control operations and status of resources within the Division/Group. The major responsibilities of the Division/Group Supervisor are:

a. Review Common Responsibilities (page 3-1);
b. Review Division/Group Assignment Lists (ICS 204-EPA form) for Divisions/Groups within the Branch. Modify lists based on effectiveness of current operations;
c. Provide the IAP to staff, when available;
d. Identify resources assigned to the Division/Group;
e. Submit resource requests through OPS or Branch Director;
f. Review Division/Group assignments and incident activities with staff and assign tasks;
g. Utilize/complete ICS 210 form, or provide information for OPS, to document changes to personnel and equipment;
h. Ensure that the OPS and/or Resource Unit is advised of all changes in the status of resources assigned to the Division/Group;
i. Coordinate activities with other Division(s)/Group(s) as appropriate;
j. Determine need for assistance on assigned tasks;
k. Submit situation and resources status information to the Branch Director or the OPS as directed;
l. Report hazardous situations, special occurrences, or significant incidents (e.g., accidents, sickness, discovery of unanticipated sensitive resources) to the immediate supervisor;
m. Develop and approve accident reports;
n. Ensure that assigned personnel and equipment get to and from assignments in a timely and orderly manner;

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o. Evaluate on-scene operations and make adjustments to organization, strategies, tactics, and resources as necessary;

p. Resolve logistics problems within the Division/Group;

q. Participate in developing plans for the next operational period; and

r. Maintain Unit/Activity Log (ICS 214 form). The Unit Log should include contractor sign-in log and equipment onsite and/or changes to the ICS 204 form for purposes of documenting contractor activities.

STRIKE TEAM/TASK FORCE LEADER (STLD/TFLD) – The STLD/TFLD reports to a Division/Group Supervisor and is responsible for performing tactical assignments assigned to the Strike Team or Task Force. The Leader reports work progress, resources status, and other important information to a Division/Group Supervisor, and maintains records (e.g., ICS 214 form) from assigned personnel. The major responsibilities of the STLD/TFLD are:

a. Review Unit Leader Responsibilities (page 3-3);

b. Review assignments with staff and assign tasks;

c. Monitor work progress and make changes when necessary;

d. Coordinate activities with appropriate Strike Teams, Task Forces, and single resources;

e. Travel to and from active assignment area with assigned resources;

f. Retain responsibility for assigned resources while in available or out-of-service status;

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g. Submit situation and resource status information to Division/Group Supervisor; and
h. Maintain Unit/Activity Log (ICS 214 form).

OPERATIONS TASK MONITOR (OPTM) – This position may be activated to assist EPA supervisors (e.g., STLD/TFLD) in monitoring the activities of contractors in a field response. Only Federal Government officials may monitor Federal contracts. The major responsibilities of the OPTM are:

a. Review Common Responsibilities (page 3-1);
b. Represent the Federal Government at the scene of contractor operations;
c. Report to the assigned supervisor regarding any deviations from the IAP-assigned tasks or other issues, as identified;
d. Report hazardous situations, special occurrences, or significant incidents (e.g., accidents, sickness, discovery of unanticipated sensitive resources) to the immediate supervisor;
e. Develop and approve accident reports; and
f. Maintain Unit/Activity Log (ICS 214 form).

Only OPTMs who are Contracting Officer Representatives (CORs) with specifically delegated authority may direct contractor operations.

SINGLE RESOURCE LEADER – This person is in charge of a single tactical resource. The major responsibilities of the Single Resource Leader are:

a. Review Common Responsibilities (page 3-1);
b. Review assignments;

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c. Obtain necessary equipment and supplies;
d. Review weather/environmental conditions for assignment area;
e. Brief staff on safety measures;
f. Monitor work progress;
g. Ensure adequate communications with supervisor and staff;

h. Keep supervisor informed of progress and any changes;
i. Brief relief personnel, and advise them of any change in conditions;
j. Return equipment and supplies to appropriate Unit;
k. Complete and turn in all time and use records on personnel and equipment; and
l. Maintain Unit/Activity Log (ICS 214 form).

CHAPTER 9

PLANNING SECTION

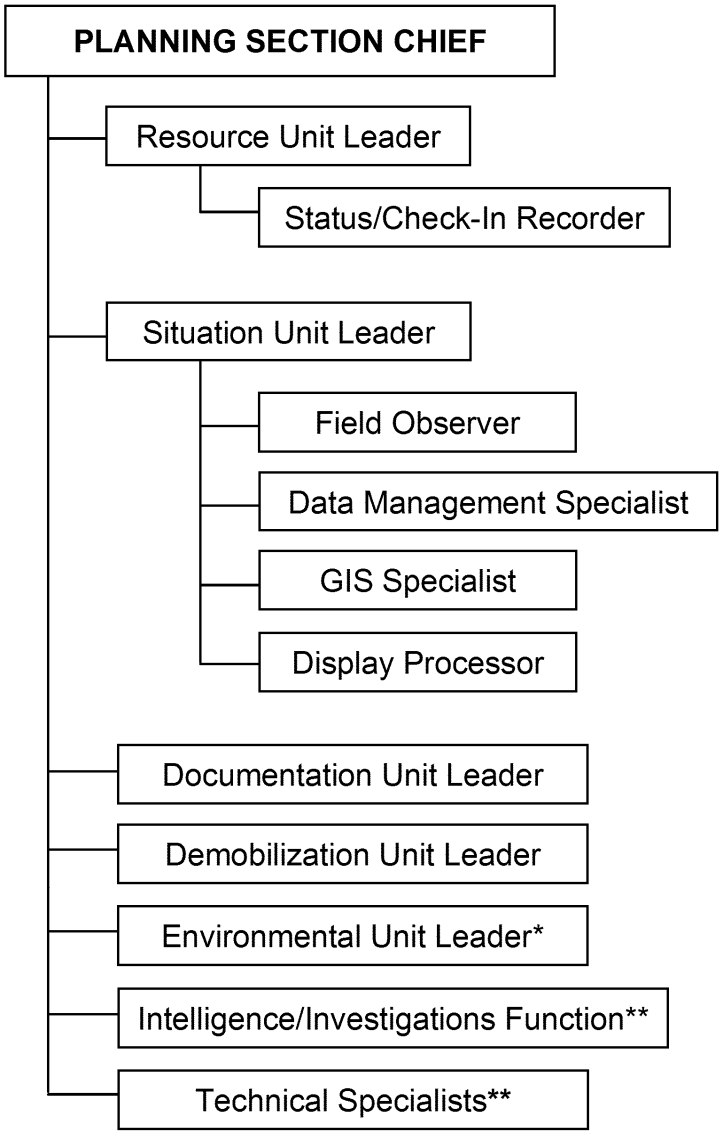

Figure 9-1: Planning Section Organization Chart

*Environmental Unit Data Management is discussed in detail in Chapter 6.

**May be assigned wherever their services are required.

PLANNING SECTION CHIEF (PSC) – The PSC, a member of the General Staff, is responsible for the collection, evaluation, dissemination and use of information about the development of the incident and status of resources. Information is needed to:

- Understand the current situation;
- Predict probable course of incident events;
- Prepare alternative strategies and control operations for the incident; and
- Submit required incident status report.

The major responsibilities of the PSC are:

a. Review Common Responsibilities (page 3-1);
b. Collect, process, and display situation information about the incident;
c. Continually communicate and share information with the Operations Section;
d. Supervise preparation of the Incident Action Plan (IAP);
e. Provide input to the Incident Commander (IC) and Operations Section Chief (OPS) in preparing the IAP;
f. Reassign out-of-service personnel already onsite to Incident Command System (ICS) organizational positions as appropriate;
g. Establish information requirements and reporting schedules for Planning Section units (e.g., Resources, Situation Units);

h. Determine need for any specialized resources in

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support of the incident;

i. If requested, assemble and disassemble Strike Teams and Task Forces not assigned to the Operations Section;

j. Establish special information collection activities as necessary (e.g., weather, environmental, toxics);

k. Assemble information on alternative strategies;

l. Provide periodic predictions on incident potential;

m. Report any significant changes in incident status;

n. Compile and display incident status information;

o. Oversee preparation and implementation of Incident Demobilization Plan;

p. Incorporate plans, (e.g., Traffic, Medical, Communications, Site Safety) into the IAP; and

q. Maintain Unit/Activity Log (ICS 214 form).

RESOURCE UNIT LEADER (RESL) – The RESL is responsible for maintaining the status of all assigned resources (primary and support) at an incident. This is achieved by overseeing the check-in of all resources, maintaining a status-keeping system indicating current location and status of all resources, and maintaining a master list of all resources (e.g., key supervisory personnel, primary and support resources). The major responsibilities of the RESL are:

a. Review Unit Leader Responsibilities (page 3-3);

b. Establish check-in function at incident locations and provide identification cards;

c. Prepare Organization Assignment List (ICS 203 form) and Organization Chart (ICS 207 form);

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d. Prepare appropriate parts of Division Assignment Lists (ICS 204 form);
e. Prepare and maintain the Incident Communications Plan (ICS 205a form) with current phone numbers;
f. Maintain and post the current status and location of all resources;
g. Maintain master roster of all resources checked in at the incident;
h. A Status/Check-In Recorder (SCKN) reports to the RESL and assists with the accounting of all incident assigned resources;
i. Work with OPS to complete Operational Planning Worksheet (ICS 215 form);
j. Attend Planning and Tactics Meeting if invited;
k. Provide personnel information to Situation Unit Leader (SITL) for completion of Incident Status Summary (ICS 209 form);
l. Work with the Logistics Section Chief (LSC) to determine resources ordered;
m. Collect important documentation for and aid PSC in the preparation of the IAP as required; and
n. Maintain Unit/Activity Log (ICS 214 form).

STATUS/CHECK-IN RECORDER (SCKN) – SCKNs are needed at each check-in location to ensure that all resources assigned to an incident are accounted for. The major responsibilities of the SCKN are:

a. Review Common Responsibilities (page 3-1);
b. Obtain required work materials, including Check-In Lists (ICS 211 form), Resource Status Cards (ICS

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219 form), and status display boards or T-card racks;

c. Post signs to ensure arriving resources can easily find incident check-in location(s);
d. Record check-in information on Check-In Lists (ICS 211 form);
e. Transmit check-in information to the Resources, Communications, and Ground Support Units on a regular prearranged schedule or as needed;
f. Forward completed Check-In Lists (ICS 211 form) and Status Change Cards (ICS 210 form) to the Resource Unit;
g. Receive, record, and maintain resource status information on Resource Status Cards (ICS 219 form) for incident-assigned single resources, Strike Teams, Task Forces, and overhead personnel;
h. Maintain files of Check-In Lists (ICS 211 form); and
i. Maintain Unit/Activity Log (ICS 214 form).

SITUATION UNIT LEADER (SITL) – The SITL reports to the PSC and supervises Field Observers, Data Management Specialists, Geographic Information Systems (GIS) Specialists, Display Processors, and other technical specialists (e.g. Weather Observers, Report Writer).

The SITL is responsible for collecting, processing, organizing, displaying, and disseminating all incident information. The major responsibilities of the SITL are:

a. Review Unit Leader Responsibilities (page 3-3);
b. Collect, compile, and manage overall incident data, establish data quality objectives, implement the quality assurance/quality control (QA/QC) process

for incident data;

c. Prepare the Incident Status Summary Form (ICS 209 form)/Situation Report (SitRep);
d. Prepare, display, and disseminate resource and situation status information as required, including special requests;
e. Prepare other reports (e.g. periodic predictions, closeout reports, status reports);
f. Provide photographic services and maps;
g. Acquire, distribute, and provide analysis of weather forecasts;
h. Report procedures and schedules for field operations;
i. Provide overflight maps and trajectory analysis;
j. Provide weather, tidal/flow, and water current information;
k. Coordinate with the Environmental Unit, if activated, regarding monitoring, analytical, and environmental data; and
l. Maintain Unit/Activity Log (ICS 214 form).

FIELD OBSERVER (FOBS) – The FOBS reports to the SITL and is responsible for observing the overall response and providing information to the SITL. The major responsibilities of the FOBS are:

a. Review Common Responsibilities (page 3-1);
b. Take photos, ground truth maps, and coordinate positions;
c. Verify response asset location, road conditions, and access routes;

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d. Report information to the SITL by established procedure;
e. Report immediately any condition observed that may cause danger and a safety hazard to personnel; and
f. Maintain Unit/Activity Log (ICS 214 form).

DATA MANAGEMENT SPECIALIST (DMTS) – The DMTS reports to the SITL and coordinates with the Environmental Unit, GIS and information technology (IT) Specialists. The DMTS also coordinates with the Logistics Section for hardware issues. The DMTS is responsible for the management and administration of the incident database. The major responsibilities of the DMTS are:

a. Review Common Responsibilities (page 3-1);
b. Create, maintain, and update the incident database;
c. Coordinate with Headquarters (HQ) on daily reports;
d. Implement database security controls and quality assurance;
e. Coordinate with the Environmental Unit to develop data collection standards and methods according to the Data Quality Objectives (DQO);
f. Provide appropriate information for situational reporting (e.g. SitRep, IAP); and
g. Maintain Unit/Activity Log (ICS 214 form).

GEOGRAPHIC INFORMATION SYSTEMS (GIS) SPECIALIST – The GIS Specialist reports to the SITL and is responsible for gathering and compiling updated information and providing various map products to the

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incident. The major responsibilities of the GIS Specialist are:

a. Review Common Responsibilities (page 3-1);
b. Participate in Planning Meetings as required;
c. Gather, compile, and fulfill map requests as prioritized by the SITL;
d. Provide status reports to appropriate requesters;
e. Manage and catalog archival maps and data; and
f. Maintain Unit/Activity Log (ICS 214 form).

DISPLAY PROCESSOR (DPRO) – The DPRO reports to the SITL and coordinates with GIS and DMTS. The DPRO is responsible for the display of incident status information. The major responsibilities of the DPRO are:

a. Review Common Responsibilities (page 3-1);
b. Create, maintain, and update incident displays (e.g. electronic and wall displays);
c. Provide appropriate information for the IAP;
d. Develop briefing materials (e.g., presentations); and
e. Maintain Unit/Activity Log (ICS 214 form).

DOCUMENTATION UNIT LEADER (DOCL) – The DOCL is responsible for the maintenance of accurate, up-to-date incident files. Examples of incident documentation include: IAP, incident reports, communication logs, injury claims, and situation status reports. This Unit shall ensure each Section is maintaining and providing appropriate documents. The Documentation Unit will provide duplication and copying services for all other Sections. The Documentation Unit will store incident files for legal,

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analytical, and historical purposes. The major responsibilities of the DOCL are:

a. Review Unit Leader Responsibilities (page 3-3);
b. Set up work area; begin organization of incident files;
c. Establish duplication service; respond to requests;
d. File all official forms and reports;
e. Review records for accuracy and completeness; inform appropriate units of errors or omissions;
f. Provide incident documentation as requested;
g. Store files for post-incident use; and
h. Maintain Unit/Activity Log (ICS 214 form).

DEMOBILIZATION UNIT LEADER (DMOB) – The DMOB is responsible for developing the Incident Demobilization Plan. The major responsibilities of the DMOB are:

a. Review Unit Leader Responsibilities (page 3-3);
b. Participate in Planning Meetings as required;
c. Review incident resource records to determine the likely size and extent of demobilization effort;
d. Based on the above analysis, add additional personnel, work space, and supplies as needed;
e. Coordinate demobilization with Agency Representatives;
f. Identify surplus resources and probable release time;
g. Develop incident check-out function for all units;
h. Evaluate logistics and transportation capabilities to support demobilization when directed;
i. Establish communications with off-incident

facilities, as necessary;

j. Develop an Incident Demobilization Plan detailing specific responsibilities and release priorities and procedures;

k. Prepare appropriate directories (e.g., maps, instructions) for inclusion in the demobilization plan;

l. Distribute demobilization plan (on and offsite);

m. Provide status reports to appropriate requestors;

n. Ensure that all Sections/Units understand their specific demobilization responsibilities;

o. Supervise execution of the Incident Demobilization Plan;

p. Brief the PSC on demobilization progress; and

q. Maintain Unit/Activity Log (ICS 214 form).

ENVIRONMENTAL UNIT LEADER (ENVL) – The ENVL is responsible for environmental matters associated with the response, including assessment, environmental monitoring, site characterization, waste characterization, sample data, site clearance and coordinating with the EPA Office of Water (OW) and Office of Air and Radiation (OAR) on permitting. (Note that some of these functions maybe assigned to TWGs or the SSC in Command Staff.) These functions may be an example of a possible Environmental Unit structure is depicted in Figure 6-1 on page 6-11. The ENVL prepares environmental data for the Situation Unit. Technical specialists frequently assigned to the Environmental Unit may include Sampling, Response Technologies, Risk Assessment, Cleanup Assessment, Historical/Cultural Resources, and Waste Management Technical Specialists. The Environmental Unit Leader's

tasks are:

a. Review Unit Leader Responsibilities (page 3-3);
b. Obtain a briefing and special instructions from the PSC;
c. Review and attend ongoing daily and weekly meetings as appropriate;
d. Determine staffing requirements and the need for technical specialists, and establish an internal Environmental Unit organization chart;
e. Conduct Environmental Unit Staff meetings to assign tasks, set priorities, assess personnel needs, identify issues, etc.;
f. Use the appropriate technical approach to make recommendations regarding the protection of public health, welfare, and the environment;
g. Coordinate with HQ Environmental Unit during a Nationally Significant Incident;
h. Coordinate with a regional Environmental Unit at the Regional Emergency Operations Center (REOC) if applicable;
i. Coordinate with and support the Scientific Support Coordinator (SSC) when one is assigned to the incident. If an SSC is not assigned, the ENVL may serve as an advisor to the (IC) for scientific issues;
j. Coordinate with and support TWGs when applicable;
k. Coordinate with Liaison Officer (LNO) with regard to natural, cultural, and historical resources protection (e.g., mitigating incident impacts) and identification of sensitive areas;

l. Provide appropriate technical advice and consultation to the Planning Section, Operations Section, and the IC in support of the decision making process, which may include the following areas:
   - Sampling Planning, Analysis, and Environmental Monitoring;
   - Quality Assurance;
   - Decontamination;
   - Waste Characterization;
   - Data Evaluation and Interpretation;
   - Environmental Modeling;
   - Ecological Assessments;
   - Human Health Assessments; and
   - Response and Cleanup Approaches.

m. Prepare Environmental Data and Information presentations and packages.

n. Maintain daily, weekly, monthly and response Unit/Activity Log (ICS 214 form).

ANALYTICAL COORDINATOR (In some responses this could be incorporated into the Operations Section)

a. Review Common Responsibilities (page 3-1);

b. Schedule all environmental sample analyses, utilizing EPA and other Federal, academic, and private laboratories as necessary;

c. Coordinate with regional representatives for the Environmental Response Laboratory Network (ERLN);

d. Ensure laboratories have capabilities to meet data

delivery requirements of Scribe and Staged Electronic Data Deliverable (SEDD);

e. Maintain lists of laboratory contacts available to assist with analyses of environmental samples during an emergency. Arrange for procurement of contract analytical resources, as necessary, including coordination with Superfund Technical Assessment and Response Team (START) on laboratory issues when START is prime contractor;

f. Ensure maintenance of chain-of-custody for samples and data throughout project;

g. Receive all analytical data regardless of laboratory. Data will be checked for completeness and appropriate level of validation before submittal to the Quality Assurance Coordinator (QAC) for QA review. Ensure analysis of samples by requested methods and delivery of data in requested format (hard copy and electronic copy as appropriate);

h. Receive all monitoring data (including field measurements, continuous instrument data, and laboratory reports) from the Situation Unit whether the monitoring was conducted by EPA field or laboratory personnel, or others. This includes data from the EPA Trace Atmospheric Gas Analyzer (TAGA), the EPA Airborne Spectral Photometric Environmental Collection Technology (ASPECT), and the EPA Portable High-throughput Integrated Laboratory Identification System (PHILIS), if deployed to the incident;

i. In cooperation with the QAC, ensure that all monitoring data are reviewed for usability;

j. Approve and provide the Incident/Unified

Command and all Environmental Unit Teams with electronic and paper analytical reports. The original is provided to Situation Unit;

k. Provide Sampling and Monitoring Plans as requested, and review and approve of the procedures developed by the Operations Section;

l. Oversee Sample Planning Team to provide Sampling and Monitoring Plans as requested, and review and approve procedures developed by the Operations Section. Report the plans and procedures to the Incident/Unified Command staff;

m. Ensure adequate download of all data to proper databases;

n. Coordinate all activities with HQ Environmental Unit, if established;

o. Ensure security and archival of all data; and

p. Maintain Unit/Activity Log (ICS 214 form).

QUALITY ASSURANCE COORDINATOR

a. Review Common Responsibilities (page 3-1);

b. Review and approve all quality assurance project plans and standard operating procedures (SOPs). Provide guidance, as necessary;

c. Supervise QA review of all analytical data;

d. Advise Unit Leaders, Division/Group Supervisors and the Incident/Unified Command on quality assurance issues and limitations on the use of data;

e. Coordinate with the HQ Environmental Unit, if established;

f. Mediate and resolve quality assurance issues with

outside laboratories and outside sampling teams, including START or similar contractors on laboratory issues;

g. Provide means for third party full data validation analyses, as appropriate;
h. Review third party data validation reports, as appropriate; and
i. Maintain Unit/Activity Log (ICS 214 form).

LABORATORY COORDINATOR

a. Review Common Responsibilities (page 3-1);
b. Provide outreach to available laboratory resources;
c. Coordinate with the regional representative for the ERLN and assist in brokering laboratory resources;
d. Set priorities for laboratory analysis;
e. Coordinate lab resources with other agencies and organizations;
f. Coordinate with the Environmental Unit, if established;
g. Work with available lab resources to facilitate sample processing (e.g., data formatting, sample transportation issues, chain-of-custody);
h. Assist in identifying lab resources, both fixed and mobile to meet needs of the incident; and
i. Maintain Unit/Activity Log (ICS 214 form).

SAMPLING AND MONITORING PLAN COORDINATOR

a. Review Common Responsibilities (page 3-1);
b. Develop and review sampling plans for all phases of the incident as requested by the IC and/or

Operations Section Chief (OPS);

c. Develop initial sampling procedures;
d. Develop and review Initial Sampling Plan;
e. Develop and review Quality Assurance Project Plan (QAPP);
f. Design long-term monitoring plans, if required by the incident;
g. Coordinate with the HQ Environmental Unit, if established;
h. Ensure that sampling teams are trained in use of Scribe and use it during sampling activities; and
i. Maintain Unit/Activity Log (ICS 214 form).

MODELING ANALYSIS COORDINATOR

a. Review Common Responsibilities (page 3-1);
b. Provide expertise in air dispersion plume modeling;
c. Provide expertise in environmental statistical sampling models;
d. Provide expertise in developing oil spill trajectories;
e. Provide expertise in groundwater and vadose zone modeling;
f. Report findings through the ENVL and PSC to the Incident Commander and the Incident Management Team (IMT); and
g. Maintain Unit/Activity Log (ICS 214 form).

DATA ASSESSMENT AND INTERPRETATION COORDINATOR

a. Review Common Responsibilities (page 3-1);

b. Assemble Assessment Team(s) with technical expertise appropriate to the project (fate & transport, risk assessment, etc.);
c. Provide preliminary assessments of environmental data regarding implications to human health and the environment;
d. Compare environmental data, internal and external to EPA, to appropriate benchmarks and background data;
e. Consult with experts in other agencies and outside of government when appropriate;
f. Assist the Incident/Unified Command in interpreting environmental data, noting areas where data gaps exist;
g. Prepare data for internal use and for public consumption; and
h. Maintain Unit/Activity Log (ICS 214 form).

DATA ASSESSMENT INTERPRETER

a. Review Common Responsibilities (page 3-1);
b. Provide the Incident/Unified Command via the Assistant ENVL with industry-appropriate Federal, state, or local benchmarks/criteria for approval;
c. Inform all Environmental Unit Teams of any corrections to analytical data;
d. Provide interpretive discussion of data based upon comparison with benchmarks, standards, or appropriate background levels;
e. Consult with appropriate regional and national experts, as necessary, in coordination with the HQ Emergency Operations Center (EOC), if

established;

f. Provide the Incident/Unified Command with electronic and paper data assessment reports. The original is provided to the Situation Unit; and

g. Maintain Unit/Activity Log (ICS 214 form).

ECOLOGICAL ASSESSMENT COORDINATOR

a. Review Common Responsibilities (page 3-1);

b. Evaluate the effects of hazardous substances on fish and wildlife;

c. Provide Resources at Risk information to Incident/Unified Command;

d. Determine the potential mitigation measures to protect fish and wildlife;

e. Provide expertise in ecological risk assessment;

f. Provide technical assistance and develop response to Endangered Species Act (ESA) consultation process;

g. Provide technical assistance and response to Historical/Cultural Resource issues;

h. Addresses groundwater, surface water, air and other related media issues; and

i. Maintain Unit/Activity Log (ICS 214 form).

HEALTH ASSESSMENT COORDINATOR

a. Review Common Responsibilities (page 3-1);

b. Coordinate human health risk assessments and consultations (e.g., Agency for Toxic Substances and Disease Registry (ATSDR) Superfund Public Health Risk Assessment Program);

c. Provide assistance in communicating health risk information to the public;
d. Liaise with Public Health officials and coordinate release of health bulletins and other outreach through the Public Information Officer (PIO); and
e. Maintain Unit/Activity Log (ICS 214 form).

The Environmental Unit should include functional positions involved with planning emergency removal and remedial cleanup activities including sampling plan development, decontamination plan development, site clearance planning, etc. Many of these planning tasks can be grouped together in one position. Agency emergency response and cleanup contractor personnel may provide position Team Leaders and staff for many of these planning functions.

INTELLIGENCE/INVESTIGATIONS FUNCTION – The Intelligence/Investigations Function ensures law enforcement investigation activities are coordinated with overall incident management activities. This function may also be under the Command Staff or PSC. Tasks include:

a. Review Common Responsibilities (page 3-1);
b. Provide the Incident Commander/Unified Command (IC/UC) with open-source, sensitive, and classified information;
c. Allow IC/UC to integrate Intelligence/Investigations with current response activities;
d. Assist the IC/UC in the determination of whether the incident is a result of criminal acts;
e. Provide IC/UC with direct links to the EPA National Counterterrorism Evident Response Team

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(NCERT), the Federal Bureau of Investigation (FBI), Joint Operations Center (JOC), or other Multiagency Coordination (MAC) centers;

f. Ensure the IC/UC have access to technical specialists to conduct Intelligence/Investigations operations; and

g. Maintain Unit/ Activity Log (ICS 214 form).

TECHNICAL SPECIALISTS

Certain incidents or events may require the use of technical specialists who have specialized knowledge and expertise. Technical specialists may function within the Planning Section, or be assigned wherever their services are required. The following are examples of technical specialists:

WEATHER OBSERVER – The Weather Observer is responsible for collecting current incident weather information and providing the information to an assigned meteorologist or to the SITL. The major responsibilities of the Weather Observer are:

a. Review Common Responsibilities (page 3-1);

b. Determine:
   - Nature and location of work assignments
   - Weather data collection methods to be used
   - Priorities for collection
   - Specific types of information required
   - Frequency of reports
   - Method of reporting
   - Source of equipment;

c. Obtain weather data collection equipment;

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d. Obtain appropriate transportation to collection site(s);
e. Record and report weather observations at assigned locations on schedule;
f. Turn in equipment at completion of assignment;
g. Demobilize according to Incident Demobilization Plan;
h. Support special requirements for development of incident maps; and
i. Maintain Unit/Activity Log (ICS 214 form).

PUBLIC HEALTH TECHNICAL SPECIALIST – Public Health Technical Specialists may be needed to provide public health/worker health and safety technical knowledge and expertise in events involving oil, hazardous substances/materials, radiation, or health and medical issues. Personnel from the Department of Health and Human Services' (HHS) Centers for Disease Control and Prevention (CDC) can provide technical assistance in the following areas:

- Human health threat assessment
- Environmental health threat assessment
- Exposure prevention
- Worker health and safety
- Toxicology and health physics
- Epidemiology
- Public health communications

LEGAL SPECIALIST – The Legal Specialist will act in an advisory capacity and:

a. Review Common Responsibilities (page 3-1);

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b. Participate in Planning Meetings, if requested;
c. Advise on legal issues relating to the use of response technologies, permitting, and strategies;
d. Advise on legal issues relating to Natural Resource Damage Assessment (NRDA);
e. Advise on legal issues relating to investigations;
f. Advise on legal issues relating to finance and claims;
g. Advise on legal issues relating to response; and
h. Maintain Unit/Activity Log (ICS 214 form).

DOCUMENTATION SPECIALIST – The Documentation Specialist will act in an advisory capacity to the IC/UC. This position can be established when the normal incident/event documentation requirements exceed the capability of the DOCL and/or the complexity of the incident/event dictates the need for more experienced oversight of the documentation process. The Documentation Specialist should perform the following functions:

a. Review Common Responsibilities (page 3-1);
b. Conduct an overall incident assessment to determine if documentation efforts will be satisfactory to meet incident/event requirements;
c. Advise the IC on the adequacy of the incident/ event documentation efforts and suggest improvements;
d. Advise the DOCL on the development of a single, central, comprehensive incident/event archive;
e. Coordinate an effective documentation system to support demobilization efforts and ensure all lingering documentation is captured by the system;

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and

f. Maintain Unit/Activity Log (ICS 214 form).

OIL SPILL TECHNOLOGIES SPECIALIST(S)

a. Review Common Responsibilities (page 3-1);
b. Identify suitable response technologies that may be considered for use to mitigate the environmental threat or impact;
c. Provide recommendations to Incident/Unified Command;
d. Provide expertise for the implementation and use of the Selection Guide for Oil Spill Applied Technologies; and
e. Maintain Unit/Activity Log (ICS 214 form).

TECHNICAL SPECIALISTS FOR CHEMICAL, BIOLOGICAL AND RADIOLOGICAL AGENTS

a. Review Common Responsibilities (page 3-1);
b. Coordinate the use of specialized equipment;
c. Assess chemical, biological or radiological hazards;
d. Recommend mitigation or decontamination strategies;
e. Recommend sampling strategies;
f. Assist in waste management planning;
g. Evaluate cleanup levels and goals;
h. Coordinate with other relevant agencies and organizations; and
i. Maintain Unit/Activity Log (ICS 214 form).

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VOLUNTEER COORDINATOR (VOLC) – The Volunteer Coordinator is a technical specialist. The VOLC initially reports to the LNO and can be reassigned as a technical specialist, normally in the Planning Section or where needed. The VOLC works with volunteer organizations and individuals to ensure that they are appropriately and safely incorporated into the response structure.

a. Review Common Responsibilities (page 3-1);
b. Ensure that volunteers are effectively utilized and tracked in the response structure and meet all of the health and safety training requirements; and
c. Maintain Unit/Activity Log (ICS 214 form).

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CHAPTER 10

LOGISTICS SECTION

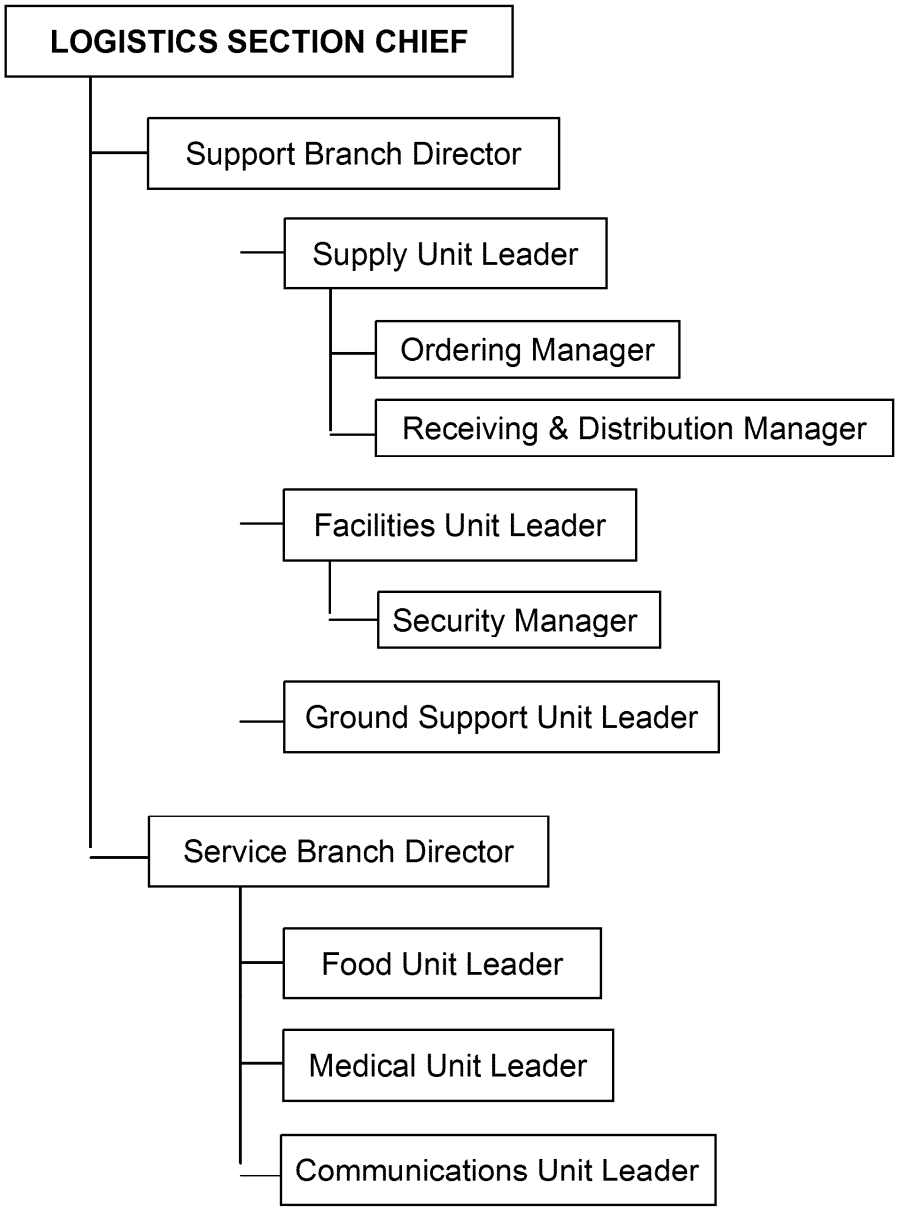

Figure 10-1: Logistics Section Organization Chart

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LOGISTICS SECTION CHIEF (LSC) – The LSC, a member of the General Staff, is responsible for providing facilities, services, and material in support of the incident response. The LSC participates in developing and implementing the Incident Action Plan (IAP), and activates and supervises Branches and Units within the Logistics Section. The major responsibilities of the LSC are:

a. Review Common Responsibilities (page 3-1);
b. Plan the organization of Logistics Section;
c. Assign work locations and preliminary work tasks to Section personnel;
d. Notify Resource Unit of activated Logistics Section units, including names and locations of assigned personnel;
e. Assemble and brief Logistics Branch Directors and Unit Leaders;
f. Participate in IAP preparation;
g. Identify service and support requirements for planned and expected operations;
h. Provide input to, and review, Communications Plan, Medical Plan, and Traffic Plan;
i. Coordinate and process requests for additional resources;
j. Review IAP and estimate Section needs for next operational period;
k. Advise on current service and support capabilities;
l. Prepare service and support elements of the IAP;
m. Estimate future service and support requirements;

n. Provide input to Demobilization Plan as required by

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Planning Section;

o. Recommend release of Unit resources in conformance with Demobilization Plan;

p. Ensure general welfare and safety of Logistics Section personnel; and

q. Maintain Unit/Activity Log (ICS 214 form).

SUPPORT BRANCH DIRECTOR (SUBD) – The SUBD, when activated, is under the direction of the LSC, and is responsible for developing and implementing logistics plans in support of the IAP, including providing personnel, equipment, facilities, and supplies to support incident operations. The SUBD supervises the operation of the Supply, Facilities, and Ground Support. The major responsibilities of the SUBD are:

a. Review Common Responsibilities (page 3-1);

b. Obtain work materials;

c. Identify Support Branch personnel dispatched to the incident;

d. Determine initial support operations in coordination with LSC and Service Branch Director (SVBD);

e. Prepare initial organization and assignments for support operations;

f. Determine logistical resource needs and coordinate with the Operations Section and the Resource Unit;

g. Maintain surveillance of assigned Unit work progress and inform LSC of activities;

h. Resolve problems associated with requests from the Operations Section;

i. Support LSC in management of service and support contracts such as Blanket Purchase Agreements (BPAs); and

j. Maintain Unit/Activity Log (ICS 214 form).

SUPPLY UNIT LEADER (SPUL) – The SPUL is primarily responsible for ordering personnel, equipment, and supplies; receiving and storing all supplies for the incident; maintaining an inventory of supplies; and servicing non-expendable supplies and equipment. The major responsibilities of the SPUL are:

a. Review Unit Leader Responsibilities (page 3-3);

b. Obtain a briefing from the SUBD or LSC;

c. Participate in Logistics Section/Support Branch planning activities;

d. Provide supplies to Planning, Logistics, and Finance/Administration Sections;

e. Determine the type and amount of supplies in route;

f. Arrange for receiving ordered supplies;

g. Review IAP for information on operations of the Supply Unit;

h. Develop and implement safety and security requirements;

i. Order, receive, distribute, and store supplies and equipment, and coordinate contracts and resource orders with the Finance/Administration Section;

j. Receive and respond to requests (e.g., via ICS 215 form) for personnel, supplies, and equipment;

k. Maintain inventory of supplies and equipment;

l. Coordinate service of reusable equipment;

m. Submit reports to the SUBD;
n. Support LSC in management of service and support contracts such as BPAs; and
o. Maintain Unit/Activity Log (ICS 214 form).

ORDERING MANAGER (ORDM) – The ORDM is responsible for placing all orders for supplies and equipment for the incident. The ORDM reports to the SPUL. The major responsibilities of the ORDM are:

a. Review Common Responsibilities (page 3-1);
b. Obtain necessary agency order forms;
c. Establish ordering procedures;
d. Determine name and telephone numbers of agency personnel who are receiving orders;
e. Set up a filing system;
f. Obtain names of incident personnel who have ordering authority;
g. Check on what has already been ordered;
h. Ensure order forms are filled out correctly;
i. Place orders expeditiously;
j. Consolidate orders when possible;
k. Identify times and locations for delivery of supplies and equipment;

l. Keep Receiving and Distribution Manager (RCDM) informed of orders placed;
m. Submit all ordering documents to Documentation Unit through SPUL before demobilization;
n. Support LSC in management of service and support contracts such as BPAs; and

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o. Maintain Unit/Activity Log (ICS 214 form).

RECEIVING AND DISTRIBUTION MANAGER (RCDM) – The RCDM is responsible for receiving and distributing all supplies and equipment (other than primary resources) and the service and repair of tools and equipment. The RCDM reports to the SPUL and has the following responsibilities:

a. Review Common Responsibilities (page 3-1);
b. Order required personnel to operate supply area;
c. Organize physical layout of the supply area;
d. Establish procedures for operating supply area;
e. Set up filing system for receiving and distributing supplies and equipment;
f. Maintain inventory of supplies and equipment;
g. Develop security requirement for supply area;
h. Submit reports to SPUL;
i. Notify ORDM of supplies and equipment received;
j. Provide necessary supply records to the SPUL;
k. Support LSC in management of service and support contracts such as BPAs; and
l. Maintain Unit/Activity Log (ICS 214 form).

FACILITIES UNIT LEADER (FACL) – The FACL is primarily responsible for the layout and activation of incident facilities (e.g., Base, Camp(s) and Incident Command Post (ICP)). The Facilities Unit provides sleeping and sanitation facilities for incident personnel and manages base and camp operations. Each facility (base or camp) is assigned a manager who reports to the FACL and is responsible for managing the operation of the facility. The basic functions or activities of the Base and Camp

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Manager are to provide security service and general maintenance. The FACL reports to the SUBD. The major responsibilities of the FACL are:

a. Review Unit Leader Responsibilities (page 3-3);
b. Obtain briefing from the SUBD or LSC;
c. Receive a copy of IAP;
d. Participate in Logistics Section/Support Branch planning activities;
e. Determine requirements for each planned facility;
f. Determine requirements for the ICP;
g. Prepare layouts of incident facilities;
h. Notify Unit Leaders of facility layout;
i. Activate incident facilities;
j. Provide Base and Camp Managers;
k. Obtain personnel to operate facilities;
l. Provide sleeping facilities;
m. Provide security services;
n. Provide facility maintenance services (e.g., sanitation, lighting, and cleanup);
o. Mobilize and demobilize base and camp facilities;
p. Maintain Facilities Unit records; Support LSC in management of service and support contracts such as BPAs; and
q. Maintain Unit/Activity Log (ICS 214 form).

SECURITY MANAGER (SECM) – The SECM is responsible for providing safeguards needed to protect personnel and property from loss or damage. The major responsibilities of the SECM are:

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a. Review Common Responsibilities (page 3-1);
b. Establish contacts with local law enforcement agencies, as required;
c. Contact Agency Representatives to discuss any special custodial requirements that may affect operations;
d. Request required personnel support to accomplish work assignments;
e. Ensure that support personnel are qualified to manage security problems;
f. Develop Security Plan for incident facilities;
g. Adjust Security Plan for personnel and equipment changes and releases;
h. Coordinate security activities with appropriate incident personnel;
i. Document all complaints and suspicious occurrences;
j. Support LSC in management of service and support contracts such as BPAs; and
k. Maintain Unit/Activity Log (ICS 214 form).

GROUND SUPPORT UNIT LEADER (GSUL) – The GSUL is primarily responsible for coordinating transportation of personnel, supplies, food, and equipment on land; fueling, servicing, maintaining and repairing vehicles and other ground support equipment; implementing the Incident Traffic Plan; and supporting out-of-service resources. The major responsibilities of the GSUL are:

a. Review Unit Leader Responsibilities (page 3-3);
b. Obtain briefing from SUBD or LSC;
c. Participate in Support Branch/Logistics Section

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planning activities;

d. Coordinate development of the Incident Traffic Plan with the Planning Section;
e. Support out-of-service resources;
f. Notify Resource Unit of all status changes on support and transportation vehicles;
g. Arrange for fueling, maintenance, and repair of ground transportation resources;
h. Maintain inventory of support and transportation vehicles (ICS 218 form);
i. Coordinate transportation services;
j. Maintain usage information on rented equipment;
k. Requisition maintenance and repair supplies (e.g., fuel, spare parts);
l. Coordinate road work for site access;
m. Submit reports to SUBD, as directed;
n. Support LSC in management of service and support contracts such as BPAs; and
o. Maintain Unit/Activity Log (ICS 214 form).

SERVICE BRANCH DIRECTOR (SVBD) – The SVBD, when activated, is under the supervision of the LSC and is responsible for managing all service activities at the incident. The SVBD supervises the operations of the Communications, Medical, and Food Units. The major responsibilities of the SVBD are:

a. Review Common Responsibilities (page 3-1);
b. Obtain working materials;
c. Determine level of service required to support

operations;

d. Confirm dispatch of Branch personnel;
e. Participate in Planning Meetings of Logistics Section personnel;
f. Review IAP;
g. Coordinate activities of Service Branch Units;
h. Inform LSC of activities;
i. Resolve Service Branch problems;
j. Support LSC in management of service and support contracts such as BPAs; and
k. Maintain Unit/Activity Log (ICS 214 form).

FOOD UNIT LEADER (FDUL) – The FDUL is responsible for supplying the food needs for the entire incident, including all remote locations (e.g., Staging Areas) as well as providing food for personnel unable to leave tactical field assignments. The major responsibilities of the FDUL are:

a. Review Unit Leader Responsibilities (page 3-3);
b. Obtain briefing from SVBD or LSC;
c. Determine location of working assignment, and number and location of personnel to be fed;
d. Determine method of feeding to best fit each situation;
e. Obtain necessary equipment and supplies to operate food service facilities;
f. Set up Food Unit equipment;
g. Prepare menus to ensure incident personnel receive well-balanced meals;
h. Ensure that sufficient potable water is available to meet all incident needs;

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i. Ensure that all appropriate health and safety measures are taken;
j. Supervise caterers and other Food Unit personnel;
k. Keep inventory of food on hand and receive food orders;
l. Provide SPUL with food supply orders;
m. Be able to cater to special needs (e.g., vegetarian and kosher meals);
n. Support LSC in management of service and support contracts such as BPAs; and
o. Maintain Unit/Activity Log (ICS 214 form).

MEDICAL UNIT LEADER (MEDL) – The MEDL, under the direction of the SVBD or LSC, is primarily responsible for developing the Medical Emergency Plan, obtaining medical aid and transportation for injured and ill incident personnel, and preparing reports and records. The Medical Unit may also assist the Operations Section in supplying medical care and assistance to civilian casualties at the incident, but is not intended to provide medical services to the public. The major responsibilities of the MEDL are:

a. Review Unit Leader Responsibilities (page 3-3);
b. Obtain briefing from SVBD or LSC;
c. Participate in Logistics Section/Service Branch planning activities;
d. Determine level of emergency medical activities performed prior to activation of Medical Unit;
e. Activate Medical Unit;
f. Prepare the Medical Plan (ICS 206 form);
g. Prepare procedures for major medical emergency;

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h. Declare major medical emergency, as appropriate;
i. Respond to requests for medical aid;
j. Respond to requests for medical transportation;
k. Respond to requests for medical supplies;
l. Prepare medical reports and submit, as directed;
m. Ensure close coordination with Safety Officer (SO);
n. Support LSC in management of service and support contracts such as BPAs; and
o. Maintain Unit/Activity Log (ICS 214 form).

COMMUNICATIONS UNIT LEADER (COML) – The COML, under the direction of the SVBD or LSC, is responsible for developing plans for the effective use of incident communications equipment and facilities; installing and testing communications equipment; supervising the Incident Communications Center; distributing communications equipment to incident personnel; and communications equipment maintenance and repair. The major responsibilities of the COML are:

a. Review Unit Leader Responsibilities (page 3-3);
b. Obtain briefing from SVBD or LSC;
c. Determine Unit personnel needs;
d. Advise on communications capabilities/limitations;
e. Prepare and implement the incident Radio Communications Plan (ICS 205 form);
f. Ensure the communications systems are installed and established;
g. Set up telephone and public address systems;
h. Establish appropriate communications distribution/ maintenance locations;

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i. Ensure an equipment accountability system is established;

j. Ensure personal portable radio equipment from cache is distributed per radio plan;

k. As required, provide technical information on:
   - Adequacy of communications systems currently in operation
   - Geographic limitation on communications systems
   - Equipment capabilities
   - Amount and types of equipment available
   - Anticipated problems in the use of communications equipment

l. Supervise Communications Unit activities;

m. Maintain records on all communications equipment, as appropriate;

n. Ensure equipment is tested and repaired;

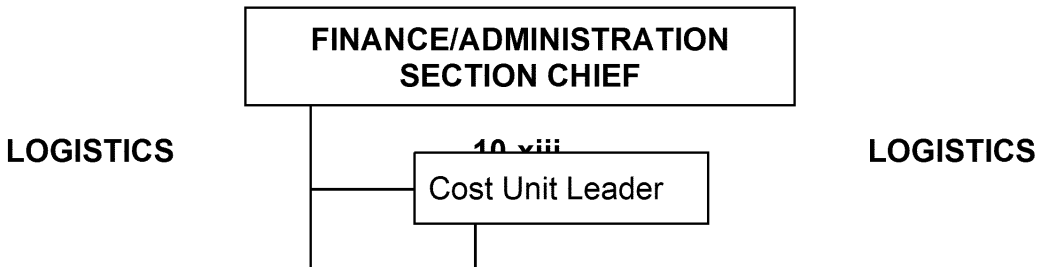
o. Recover equipment from relieved or released units;

p. Support LSC in management of service and support contracts such as BPAs; and

q. Maintain Unit/Activity Log (ICS 214 form).

CHAPTER 11

FINANCE/ADMINISTRATION SECTION



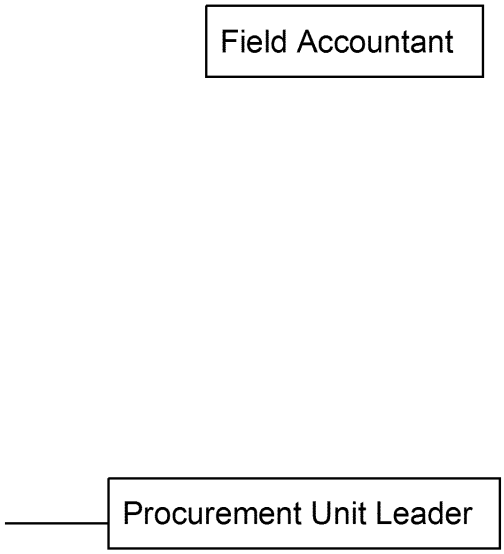


Figure 11-1: Finance/Administration Section Organization Chart

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FINANCE/ADMINISTRATION SECTION CHIEF (FSC) – The FSC, a member of the General Staff, is responsible for all financial and cost analysis aspects of the incident and for supervising members of the Finance/Administration Section. The major responsibilities of the FSC are:

a. Review Common Responsibilities (page 3-1);
b. Attend briefing with responsible agency to gather information;
c. Attend Planning Meetings to gather information on overall strategy;
d. Manage all financial aspects of an incident (e.g., Mission Assignment coordination, Interagency Agreement (IAG) coordination, National Pollution Funds Center (NPFC) coordination*);
e. Secure funding source according to appropriations and authorities;
f. Track funds received and obligated;
g. Develop an operating plan for Finance/ Administration function on incident;
h. Prepare work objectives for FSC staff, brief staff, and make assignments;
i. Inform members of the Incident/Unified Command (UC) and General Staff when Section is fully operational;
j. Meet with assisting and cooperating company/ Agency Representatives, as required;
k. Provide input in all planning sessions on financial and cost analysis matters including burn rate;
l. Maintain daily contact with region on finance matters;

m. Ensure that all personnel time records are transmitted to home company/agency according to policy;

n. Participate in all demobilization planning;

o. Review all funding documents (e.g., ICS 213 form, or other specific documents) initiated at the incident to ensure that they are properly prepared and completed;

p. Coordinate with the Funds Certifying Official (FUND);

q. Brief agency administration personnel on all incident-related business management issues needing attention and follow-up prior to leaving incident;

r. Coordinate as needed on any claims/ compensation issues with affected staff in the region (e.g., Safety Officer, Human Resources Officer);

s. Ensure that all documents are up to date and routed to the proper office;

t. Provide finance updates for the Situation Report (SitRep);

u. Ensure Coordination with Emergency Support Function (ESF) representative at the Joint Field Office (JFO); and

v. Maintain Unit/Activity Log (ICS 214 form).

* The United States Coast Guard (USCG) National Pollution Funds Center (NPFC) manages the Oil Spill Liability Trust Fund (OSLTF). EPA has a Memorandum of Understanding (MOU) agreement

with the NPFC for reimbursement of costs associated with its oil spill response work. EPA can also access reimbursable funds through a Pollution Removal Funding Authorization (PRFA) with USCG. The USCG determines if a PRFA or MOU can be opened for a response. Some of the costs which are reimbursable under a PRFA include, but are not necessarily limited to:

- Personnel salary costs, including overtime;
- Travel and per diem expenses;
- Actual expenses for contractor or vendor supplied goods and services obtained by the other government agency, through its own purchasing process; and
- Agreed upon/appropriate charges for the utilization of government agency owned equipment or facilities.

The Cincinnati Finance Center (CFC) is the agency contact point with NPFC on oil cost reimbursement. Regions provide approval of invoices and ensure that all appropriate cost documentation is provided to the CFC. All documentation for oil contractor work performed during a spill must be provided to CFC within five business days following approval of the invoice. CFC will seek reimbursement with NPFC once the cost package is complete.

COST UNIT LEADER (COST) – The COST is responsible for collecting all cost data, performing cost-effectiveness analyses, and providing cost estimates and cost-saving recommendations for the incident. The major responsibilities of the COST are:

a. Review Unit Leader Responsibilities (page 3-3);

b. Obtain briefing from FSC;
c. Coordinate with company/agency headquarters on cost-reporting procedures;
d. Obtain and record all cost data;
e. Prepare incident cost summaries;
f. Prepare resource-use cost estimates for the Planning Section (e.g., burn rate/forecast);
g. Make recommendations for cost-savings to FSC;
h. Maintain cumulative incident cost records;
i. Ensure that all cost documents are accurately prepared;
j. Complete all cost/financial logs/records prior to demobilization (e.g., purchase card logs);
k. Provide reports to FSC; and
l. Maintain Unit/Activity Log (ICS 214 form).

FIELD ACCOUNTANT (FACC) – The FACC is responsible for providing contractor cost oversight, and site administrative and logistical support to the Incident Management Team (IMT). The major responsibilities of the FACC are:

a. Review Common Responsibilities (page 3-1);
b. Obtain briefing from COST;
c. Coordinate with Cost Unit on cost-reporting procedures;
d. Coordinate with the Funds Certifying Official (FUND) as needed;
e. Review documents for validity, budget, capacity, and ceiling limitations;
f. Establish site file and administrative record;

g. Review contractor daily cost reports (EPA Form 1900-55)
h. Ensure all documents are accurately prepared;
i. Ensure all records are current or complete prior to demobilization;
j. Brief COST on current problems, recommendations, outstanding issues, and follow-up requirements; and
k. Maintain Unit/Activity Log (ICS 214 form).

FUNDS CERTIFYING OFFICIAL (FUND) – The FUND is responsible for funding travel authorizations and procurements in support of the response. The major responsibilities of the FUND are:

a. Review Common Responsibilities (page 3-1);
b. Obtain briefing from COST;
c. Coordinate with Cost Unit on cost-reporting procedures;
d. Coordinate with Resource Unit Leader (RESL) as needed;
e. Maintain incident cost records for travel funding if requested to do so by the region;
f. Ensure all documents are accurately prepared;
g. Ensure all records are current or complete prior to demobilization;
h. Brief COST on current problems, recommendations, outstanding issues, and follow-up requirements; and
i. Maintain Unit/Activity Log (ICS 214 form).

COMPENSATION/CLAIMS UNIT LEADER (COMPS) –

The COMPS is responsible for coordinating the processing of all claims which require payment. The major responsibilities of COMPS are:

a. Review Unit Leader Responsibilities (page 3-3);
b. Obtain briefing from FSC;
c. Coordinate invoice payment with Procurement Unit Leader (PROC);
d. Coordinate with Cost Unit on cost-reporting procedures;
e. Coordinate coding of pay documents with Time Unit Leader (TIME);
f. Prepare incident claim summaries;
g. Provide for records security;
h. Ensure all records are current or complete prior to demobilization;
i. Brief FSC on current problems, recommendations, outstanding issues, and follow-up requirements; and
j. Maintain Unit/Activity Log (ICS 214 form).

TIME UNIT LEADER (TIME) – The TIME is responsible for time records associated with equipment and personnel. The major responsibilities of the TIME are:

a. Review Unit Leader Responsibilities (page 3-3);
b. Obtain briefing from FSC;
c. Determine resource needs within the Unit;
d. Establish contact with all incoming personnel to verify or input accurate accounts for payroll and travel authorization;
e. Establish time and attendance reporting

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procedures for the incident;

f. For each operational period, initiate, gather, or update a time report (e.g. sign-in/sign-out sheets) from all applicable personnel assigned to the incident. Ensure that the time report is signed by the designated field supervisor;

g. Collect all personnel charges associated with the response;

h. Ensure that daily personnel time recording documents are prepared in compliance with time reporting policies;

i. If appropriate, ensure that information from the daily sign-in logs are entered into Removal Cost Management System (RCMS);

j. Collect and distribute all time documents according to Agency policy;

k. Submit personnel cost estimate data to Cost Unit, as required;

l. Provide for records security;

m. Ensure that all records are current or complete prior to demobilization;

n. Brief FSC on current problems, recommendations, outstanding issues, and follow-up requirements; and

o. Maintain Unit/Activity Log (ICS 214 form).

PROCUREMENT UNIT LEADER (PROC) – The PROC is responsible for administering all financial matters pertaining to contracts. The major responsibilities of the PROC are:

a. Review Unit Leader Responsibilities (page 3-3);

b. Obtain briefing from FSC;

c. Coordinate appropriate Unit Leaders on incident needs and any special procedures;
d. Facilitate land use agreements, as needed;
e. Establish contracts with supply vendors, as required;
f. Interpret contracts/agreements and resolve claims or disputes within delegated authority;
g. Facilitate/coordinate invoice payment;
h. Finalize/close out all agreements and contracts;
i. Coordinate cost data in contracts with COST; and
j. Maintain Unit/Activity Log (ICS 214 form).

CHAPTER 12

UNIFIED COMMAND

While a single Incident Commander (IC) normally handles the command function, an Incident Command System (ICS) organization may be expanded into a Unified Command (UC). As a component of ICS, the UC is a structure that brings together the “Incident Commanders” of all major organizations involved in the incident to coordinate an effective response, while at the same time carrying out their own jurisdictional responsibilities. The UC links the organizations responding to the incident and provides a forum for these agencies to make consensus decisions. Under the UC, the various jurisdictions and/or agencies and non-government responders may blend together throughout the organization to create an integrated response team.

The UC may be used whenever multiple jurisdictions are involved in a response effort. These jurisdictions could be represented by:

- Geographic boundaries (e.g., two states, Indian tribal land);
- Governmental levels (e.g., Federal, state, local, tribal);
- Functional responsibilities (e.g., fire, oil spill, Emergency Medical Services (EMS));
- Statutory responsibilities (e.g., Federal Land Managers, Responsible Party (RP)); or
- Some combination of the above.

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Actual UC makeup for a specific incident will be determined on a case-by-case basis taking into account: (1) the specifics of the incident; (2) determinations outlined in existing response plans; or (3) decisions reached during the initial meeting of the UC. The makeup of the UC may change as an incident progresses in order to account for changes in the situation.

To be effective, the number of personnel should be kept as small as possible. The UC is responsible for overall management of the incident; ICs retain the responsibilities listed in Chapter 7 – Command Staff. A well-defined process requires the UC to set clear objectives to guide the on-scene response resources. The UC is not a “decision by committee.” The principals are there to command the response to an incident. Time is of the essence. The UC should develop synergy based on the significant capabilities that are brought by the various representatives. There should be personal acknowledgement of each representative’s unique capabilities, a shared understanding of the situation, and agreement on the common objectives. With the different perspectives on the UC comes the risk of disagreements, most of which can be resolved through the understanding of the underlying issues. Contentious issues may arise, but the UC framework provides a forum and a process to resolve problems and find solutions.

A cooperative attitude is essential. Nevertheless, situations may arise where consensus agreement may not be reachable. In such instances, the UC member representing the agency with primary jurisdiction over the issue would normally be deferred to for the final decision.
The bottom line is that UC has certain responsibilities as

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noted above. Failure to provide clear objectives for the next operational period means that the Command function has failed. While the UC structure is an excellent vehicle (and the only nationally recognized vehicle) for coordination, cooperation, and communication, the duly authorized representatives must make the system work successfully. A strong Command—a single IC or UC—is essential to an effective response.

Each UC member may assign Deputy Incident Commander(s) to assist in carrying out IC responsibilities. UC members may also be assigned individual legal and administrative support from their own organizations.

To be considered for inclusion as a UC representative, your organization must:

- Have jurisdictional authority or functional responsibility under a law or ordinance for the incident;
- Be significantly impacted by the incident or response operations; and
- Be specifically charged with commanding, coordinating, or managing a major aspect of the response.

Representatives to the UC should:

- Have the capability to sustain an appropriate time commitment to the incident;
- Have the authority to commit agency or company resources to the incident; and
- Have the authority to spend agency or company funds.

UC representatives must be able to:

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- Agree on common incident objectives and priorities;
- Agree on an incident response organization;
- Agree on which agency will take the lead as the Incident Commander (based on jurisdictional responsibilities) and the appropriate position assignments in General Staff to ensure clear direction for on-scene tactical resources;
- Commit to speak with “one voice” through the Public Information Officer (PIO) or Joint Information Center (JIC), if established;
- Agree on logistical support procedures; and
- Agree on cost-sharing procedures, as appropriate.

It is important to note that participation in a UC occurs without any agency abdicating authority, responsibility, or accountability.

What if your agency is not a part of the Unified Command? Here is how to ensure your organization’s concerns or issues are addressed:

- Serve as an agency or company representative;
- Provide input to your agency or company representative who has direct contact with the Liaison Officer (LNO);
- Provide stakeholder input to the LNO (for environmental, economic, or political issues); or
- Serve as a technical specialist in the Planning Section (reassigned, as appropriate).

For additional information on Unified Command, reference the National Response Team’s ICS/UC Technical Assistance Document (TAD) at www.nrt.org.

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CHAPTER 13

AREA COMMAND

Area Command (AC) is an expansion of the incident command function primarily designed to manage a very large incident or area that has multiple Incident Management Teams (IMTs) assigned. An AC can be established any time incidents are close enough that oversight direction is required among IMTs to ensure conflicts do not arise.

The function of the AC is to develop broad objectives for the impacted area and coordinate the development of individual incident objectives and strategies. Additionally the AC will set priorities for the use of critical resources allocated to the incidents assigned to the area.

The organization is normally small with personnel assigned to Command, Planning, Logistics, and Finance/ Administration functions. Depending on the complexity of the interface between incidents, specialists in other areas such as aviation, environmental fate and transport, and occupational and/or public health may also be assigned to the AC.

An AC should not be confused with the functions performed by a local or state Emergency Operations Center (EOC) or a Departmental/Agency Operations Center (DOC), such as an EPA Regional Emergency Operations Center (REOC). An AC oversees management and resource allocation of the incident(s), while an EOC/DOC coordinates support functions. When incidents do not have similar resource demands, they are usually

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handled separately and coordinated through an EOC. This organization does not supplant the Incident Commanders (ICs), but rather supports and provides strategic direction. Execution of tactical operations and coordination remains the responsibility of the on-scene incident command structure.

AREA COMMAND CONCEPT OF OPERATIONS

ACTIVATION CRITERIA – For situations that warrant an AC, it is likely in most cases that the impacted area would be subject to a multiagency response and require a Unified Area Command. This decision is made jointly among appropriate jurisdictions, and the Unified Area Command Post would be located in the vicinity of the impacted area. For establishment of a single-agency (EPA) Area Command, the EPA Regional Incident Coordinator (RIC) or Incident Commander (IC) can determine when an incident(s) is of such magnitude, complexity, or operational intensity that it would benefit from the activation of an AC. Factors to consider when deciding to activate an AC include but are not limited to:

- A complex incident that overwhelms regional assets;
- An incident that impacts more than one EPA region;
- An incident that crosses international borders; and
- More than one active incident where incidents are competing for the same resources or an incident spread over a wide geographic area.

ACTIVATION GUIDANCE – When the decision is made to activate an AC, the following actions should occur:

- An Area Commander is designated by the EPA RIC(s);

- Designated Area Commander and Deputy will be delegated clear succession of command authority;
- If an incident(s) is multijurisdictional, the AC shall be established using Unified Command (UC) concepts and principles. When UC is established, representatives will typically consist of executives possessing the highest level of response authority as possible; and
- Determine appropriate location for the Area Command Post.

AC RESPONSIBILITIES – The AC has the overall responsibility for strategic management of the incident and will:

a. Establish AC strategic objectives;
b. Establish overall response priorities;
c. Rank incidents in order of priority;
d. Identify and allocate critical resources based on incident needs;
e. Ensure that the incident(s) is properly managed;
f. Ensure that the on-scene incident(s) objectives are met;
g. Minimize conflict with supporting agencies/ stakeholder and public concerns;
h. Coordinate acquisition of critical or specialized resources; and
i. In the event that a Joint Field Office (JFO) is activated, coordinate acquisition of national assets to support the incident(s) between AC and the JFO.

The AC organization should be kept as small as possible. The size of the AC organization will be determined by the authorities and support requirements of the incident(s). Under normal circumstances, AC staffing will consist of the following positions:

- Area Commander(s) and Deputy;
- Liaison Officer (LNO);
- Public Information Officer (PIO);
- Area Planning Section Chief (PSC);
- Area Logistics Section Chief (LSC);
- Area Finance/Administration Section Chief (FSC);
- Situation Unit Leader (SITL);
- Resource Unit Leader (RESL);
- Environmental Unit Leader (ENVL);and
- Intelligence/Investigations Officer (IIO);

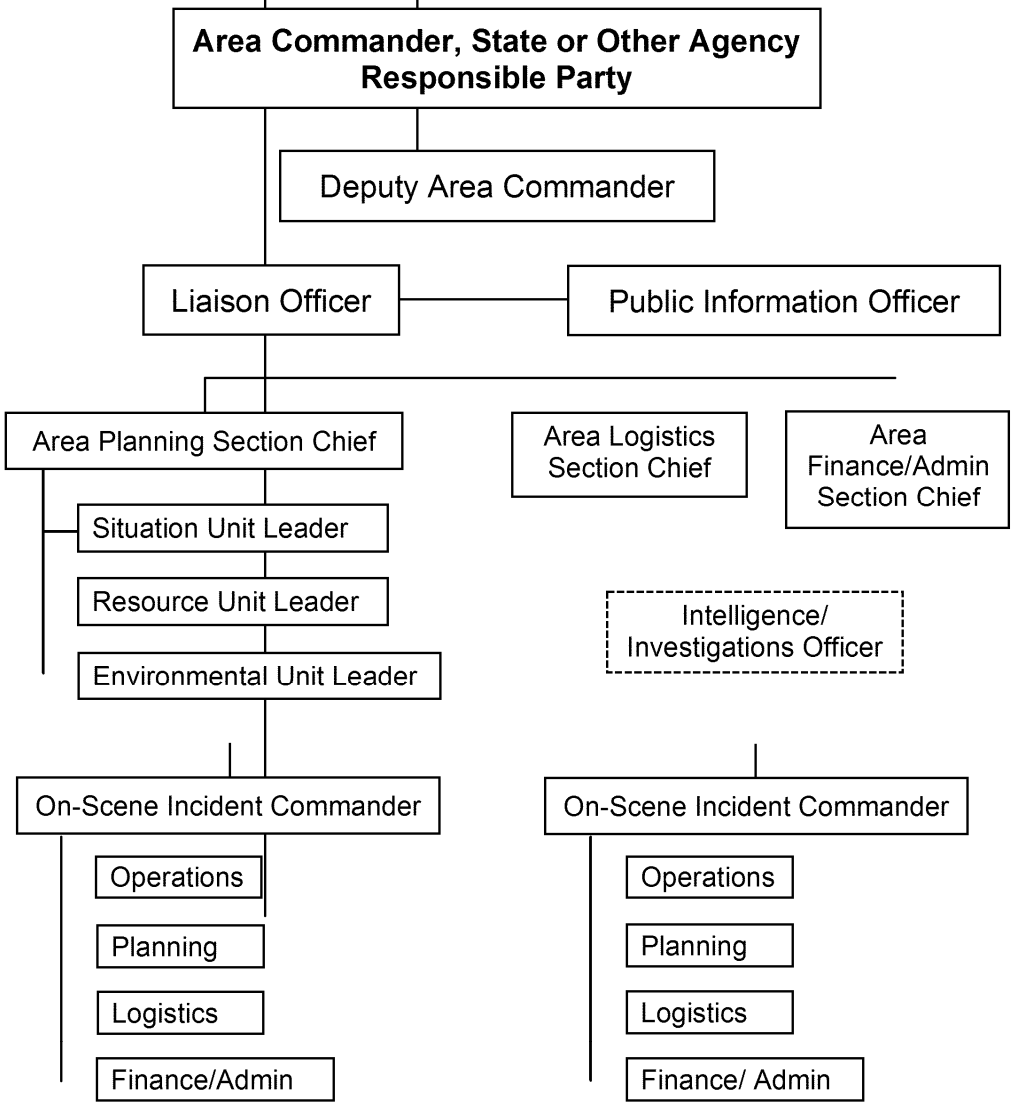
The AC organization does not, in any way, replace the on-scene incident organization or functions. The above positions, if established, are strictly related to supporting the AC functional responsibilities. Tactical operations continue to be directed at the on-scene command level.

AC REPORTING RELATIONSHIPS

It is envisioned that the role of Area Commander will be filled by an appropriately trained IC with the ability to set priorities and objectives on behalf of the EPA. When established, the Area Commander reports through normal EPA management chain-of-command. If a JFO or other Multiagency Coordination (MAC) entity is established, the AC will need to determine the appropriate level of coordination and liaison required to support the incident(s).

Figure 13.1: AREA COMMAND ORGANIZATION

An organization chart showing the basic Regional Area Command is:



Note: An agreement must be reached with AC on where the Intelligence/ Investigations Officer position will be located within the AC organization.

Note: NIMS Area Command includes an Aviation Coordinator position. This position was intentionally left out. The AC can add the position anytime they determine a need for special aviation coordination.

POSITION CHECKLISTS

AREA COMMANDER (SINGLE/UNIFIED AREA COMMAND) – The Agency's Area Commander is responsible for providing the overall strategic direction and support to the on-scene Incident Commander/Unified Command (IC/UC). This responsibility includes ensuring that conflicts are resolved, incident objectives are established, and strategies are selected for the use of critical resources. The Area Commander has the responsibility of coordinating with the Regional Emergency Operations Center (REOC) and EPA Headquarters (HQ) Emergency Operations Center (EOC) as follows:

a. Review Common Responsibilities (page 3-1);
b. Provide briefings to EPA HQ through the HQ EOC, and obtain feedback regarding Agency expectations, concerns, and constraints;
c. If operating within a Unified Area Command, develop a working agreement with all participants to employ the National Incident Management System (NIMS) Incident Command System (ICS) as the response management system (if possible, this should be worked out well in advance);
d. Assess the incident potential and ensure the Agency infrastructure is capable of meeting incident objectives;
e. Provide clear understanding of Agency expectations, intentions, and constraints;
f. Provide strategic and overarching logistical management of the incident(s), including setting of overall strategic objectives;
g. Ensure that the response addresses the

management objectives set by the RIC;

h. Establish priorities for assignment and demobilization of critical resources;

i. Assign and approve demobilization of critical resources;

j. Approve procedures for release of information to the media and the public in coordination with the field PIO and the HQ PIO Unit which will be led by Office of Public Affairs (OPA) personnel;

k. With the assistance of the IC/UC and in coordination with the region and HQ as necessary, determine the Agency's public spokesperson for the overall crisis response;

l. Manage the AC organization to ensure the on-scene ICs are appropriately supported;

m. Identify location and establish an appropriate command post, if necessary;

n. Ensure that an AC Occupant Emergency Plan is developed and monitor for compliance;

o. Ensure that the strategic objectives address the direction set by the RIC; and

p. Maintain Unit/Activity Log (ICS 214 form).

DEPUTY AREA COMMANDER

a. Review Common Responsibilities (page 3-1);

b. Assist the Area Commander in executing his/her responsibilities;

c. Oversee and facilitate the overall operation of the AC staff;

d. Perform Area Commander duties in the absence of designated Area Commander; and

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e. Maintain Unit/Activity Log (ICS 214 form).

AREA COMMAND LIAISON OFFICER (LNO)

a. Review LNO Responsibilities (page 7-6);
b. Establish liaison, as needed, with representatives of assisting and cooperating agencies. This will often be with the same agencies represented at the IC level, but will typically be a link to a more senior organizational level than that represented on-scene;
c. Establish liaison, as needed, with stakeholders (environmental, economic, and political) and coordinate with the PIO as needed on outreach. There may be some stakeholders that, because of their wide area of influence, organization, and interest, will desire representation at both the IC level and at the AC level. It is expected, however, that the majority of stakeholder service and support will be handled at the IC level;
d. Monitor and support as requested, the IC's LNO(s) efforts to establish strong ties to assisting/ cooperating agencies and stakeholders;
e. Monitor and measure stakeholders' and assisting and cooperating agencies' perception of the effectiveness of the response, and keep the Area Commander and staff advised;

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f. Liaise with all investigating agencies, supporting their activities so as to provide for best possible progress without interference with the incident response. As much as possible, the Area Commander will deal with all investigating agencies in an effort to reduce/minimize impact on field operations; and

g. Maintain Unit/Activity Log (ICS 214 form).

AREA COMMAND PUBLIC INFORMATION OFFICER (PIO)

a. Review PIO Responsibilities (page 7-4);

b. In coordination with the field PIO and the HQ PIO Unit (led by OPA personnel), the AC PIO will generally provide information on overall progress and status of the response from a regional or national perspective;

c. Identify and communicate to AC staff the AC policy and procedures for release of information;

d. Ensure that the Crisis Communications Plan is followed;

e. If appropriate, establish the AC Joint Information Center (JIC), as directed by the Area Commander;

f. Coordinate with the IC's PIO(s) to obtain information and to ensure consistency;

g. Observe and support as requested the IC's PIO(s)' efforts to establish strong and effective public information services;

h. Monitor and measure public and media perception of response effectiveness and keep the Area Commander and staff advised;

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i. Schedule and keep the Area Commander and staff informed of news releases, press conferences, town meetings, etc. to be conducted at the regional/national level;

j. Prepare material and coordinate the conduct of press conferences, town meetings, etc. Provide speaker preparation and coaching to members of the AC staff;

k. Carry out the protocol function for visiting dignitaries, including coordination and conduct of briefs and site visits. As much as possible, the AC will deal with VIPs in an effort to reduce staff load at the IC(s) level; and

l. Maintain Unit/Activity Log (ICS 214 form).

AREA COMMAND PLANNING SECTION CHIEF (PSC) –

The AC PSC is responsible for collecting information from the field in order to assess and evaluate potential conflicts in establishing strategic objectives, and the priority of critical resources, as follows:

a. Review PSC Responsibilities (page 9-3);

b. Review for consistency, the IC(s) Incident Action Plans (IAP). Ensure that the IC(s) are adequately and appropriately anticipating and preparing for future response needs as well as the next operational period. Brief IAP(s) to Area Commander and staff;

c. Under the direction of the Area Commander, facilitate/conduct AC staff meetings;

d. In consultation with the AC Logistics Section Chief (AC LSC), the AC Resource Unit Leader (AC RESL) (if assigned), and the AC Situation Unit

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Leader (AC SITL), recommend to Area Commander the incident priorities;

e. In consultation with the AC LSC, AC RESL (if assigned), and AC SITL, recommend to the Area Commander the assignment and demobilization of critical resources;

f. Prepare and distribute the AC policies, procedures and decisions to the AC staff and the on-scene ICs. Maintain a record of all these documents;

g. Develop/assemble the AC Action Plan. The AC Action Plan should address the following:

- AC strategic objectives;
- Critical Resources (Critical Resources are any piece of equipment or personnel with technical or subject matter expertise, or other capabilities requested by the IC(s) that are in high demand or short supply and essential for the proper execution of tactical actions at the incident as applicable);
- Incident Priorities (as applicable to critical resources);
- AC Staff Organization Chart, showing names and assigned positions of all participants;
- AC Staff Meeting and Briefing Schedule; including the schedule for phone calls and the meeting of the Area Commander with the IC(s);
- AC Communication Plan should identify how the AC staff is able to communicate with the IC(s) and others;
- AC Information Plan;

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- Unusual situation and emergency procedure reporting;
- 24-hour watch procedures; and
- As needed, AC policy, procedures and decisions.

h. As needed, develop briefing paper(s) on incident-specific issues and concerns. Issues and concerns are matters raised in the course of the response that the Area Commander desires to have researched or discussed as an aid to fully understanding the issue;

i. Ensure that the IC(s) are adequately anticipating and developing contingencies for addressing future response needs; and

j. Maintain Unit/Activity Log (ICS 214 form).

AREA COMMAND SITUATION UNIT LEADER (SITL)

a. Review SITL Responsibilities (page 9-6);

b. Develop and implement procedures for establishing and maintaining current the “common operational picture” for the AC and staff. This includes proactive intelligence gathering from all AC staff elements and the IC(s) SITLs;

c. Maintain current situation status displays;

d. Prepare incident situation information for support of, and use in, briefing documents and presentations;

e. Support/assist the AC Planning Section with developing recommendations for establishing priorities and assigning/demobilizing critical resources;

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f. As required by the Area Commander, provide frequent/timely incident status updates to the region, EPA HQ, and other agencies and entities; and

g. Maintain Unit/Activity Log (ICS 214 form).

AREA COMMAND RESOURCE UNIT LEADER (RESL)

a. Review RESL Responsibilities (page 9-4);

b. Maintain resource status for all critical resources. This will require regular contact with on-scene RESLs to ensure that resource status is current. Also, track AC staff and resources that directly support the staff;

c. Support/assist the AC Planning Section in developing recommendations for establishing priorities, and for assigning and demobilizing critical resources;

d. Working with the ICs, submit critical resource needs to the AC Logistics Section;

e. Coordinate with the AC Finance/Administration Section to track overhead/costs for AC; and

f. Maintain Unit/Activity Log (ICS 214 form).

AREA COMMAND ENVIRONMENTAL UNIT LEADER (ENVL) – In the event an AC is activated, the AC Environmental Unit is established to provide cross-incident data management, analysis, strategic assessment, waste management planning, and other cross-incident environmental issues. The AC Environmental Unit will coordinate closely with any Environmental Units at the incident level, which will retain responsibility for providing operational support to the ICs, including management of

incident-specific data. Specific responsibilities of the AC ENVL include, but are not limited to:

a. Review ENVL Responsibilities (page 9-12);
b. Evaluate the opportunities to use various response technologies;
c. Work with AC SITL to present data;
d. Ensure that quality assurance is fully integrated into the entire response;
e. Ensure validation of sampling data;
f. Ensure oversight of data assessment and interpretation;
g. Provide summary reports for media/public affairs in coordination with the HQ PIO Unit led by OPA personnel;
h. Recommend benchmarks/criteria; and
i. Maintain Unit/Activity Log (ICS 214 form).

AREA COMMAND LOGISTICS SECTION CHIEF (LSC)

a. Review LSC Responsibilities (page 10-2);

b. Provide facilities, services, communications capabilities and administrative supplies for the AC organization;
c. Obtain specialists and AC staff support, as requested;
d. Establish liaison with IC(s) Logistics Section(s) so as to identify critical resources;
e. Support/assist AC Planning Section in developing recommendations for establishing priorities to govern the assignment of critical resources and to

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develop recommended assignment/demobilization of critical resources;

f. As necessary, provide for identification and acquisition of national level response resources needed by the IC(s). Track critical resources from time ordered to check-in;

g. When directed by the Area Commander, take charge of expanded supply network to support the IC(s);

h. Develop the AC Communication Plan (should identify how the AC staff is able to communicate with the IC(s) and others);

i. Track national/international resources until they arrive at the scene and are turned over to the cognizant incident RESL;
Coordinate directly with AC Finance/Administration Section for procurement and accounting purposes; and

j. Maintain Unit/Activity Log (ICS 214 form).

AREA COMMAND FINANCE/ADMINISTRATION SECTION CHIEF (FSC) – In addition to reviewing FSC Responsibilities (page 11-2), work with Field Accountants (FACCs) at the incident level to:

a. Track and document total response costs;

b. Ensure that response costs are managed within the established financial ceilings and guidelines; coordinate ceiling adjustments;

c. For oil and hazardous materials incidents, keep the Area Commander advised as to the impact on the Oil Spill Liability Trust Fund (OSLTF) or Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Fund and potential/projected time for reaching liability limits of the Responsible Party (RP);

d. Establish a funding conduit through use of Pollution Removal Funding Authorization (PRFA) or other interagency agreements and ensure compliance with all costs;

e. Coordinate the overall processing of claims with the RP and IC(s); and

f. Maintain Unit/Activity Log (ICS 214 form).

AREA COMMAND INTELLIGENCE/INVESTIGATIONS OFFICER (IIO)

a. Review IIO Responsibilities (page 15-3);

b. Working with AC, determine the level and complexity of intelligence needed to support their efforts;

c. Reach agreement with AC on where the

Intelligence position will be located within the AC organization;

d. Determine intelligence gaps and requirements needed to support AC's decision making process and the development of the Operations Briefing;

e. Analyze and share intelligence among AC organization, involved partners, and the on-scene IC;

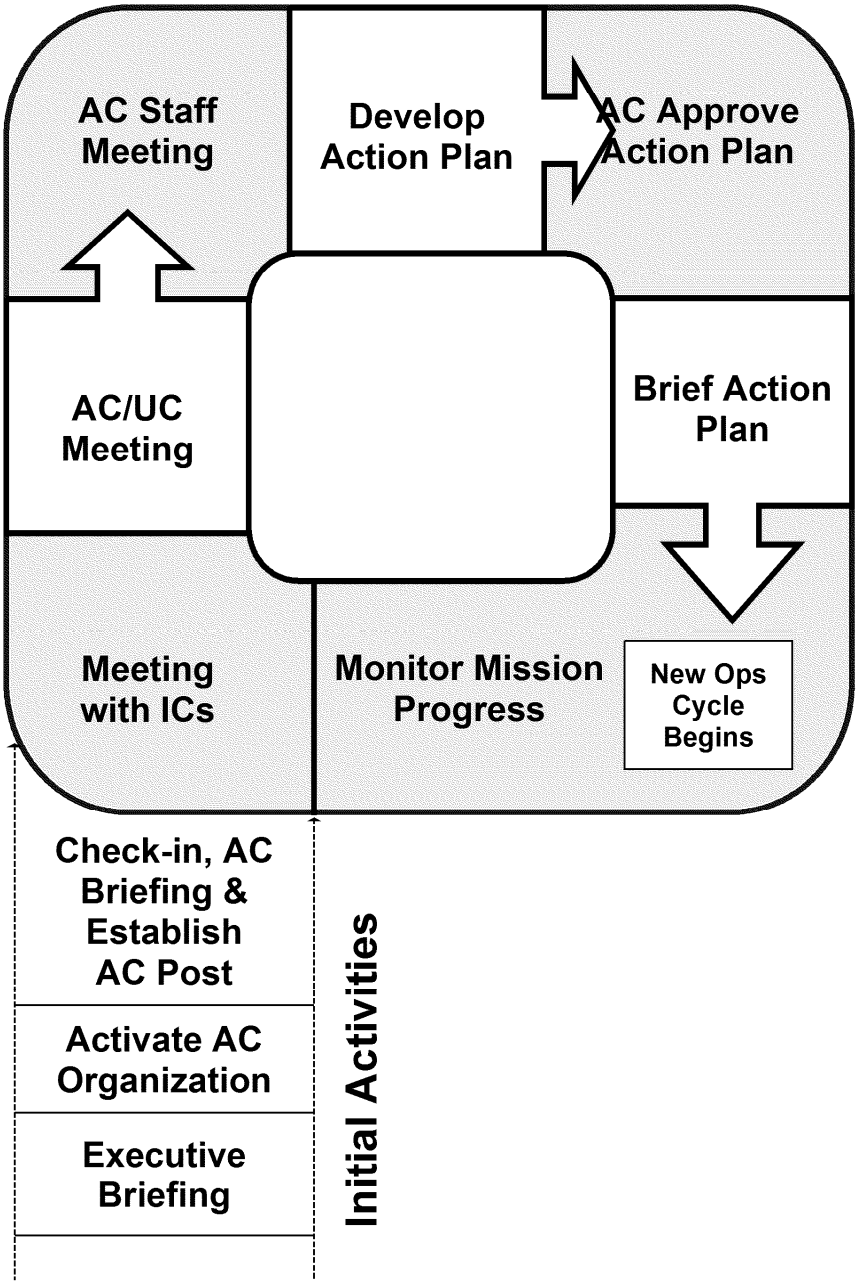
f. Manage and process classified and unclassified requests for intelligence;

g. Ensure that intelligence is properly used and filed;

h. Coordinate intelligence gathering activities with other external agencies and organizations (e.g., Federal Bureau of Investigation (FBI), state and local law enforcement); and

i. Maintain Unit/Activity Log (ICS 214 form).

AREA COMMAND PLANNING CYCLE MEETINGS, BRIEFINGS, AND THE ACTION PLAN PROCESS



The period of initial activation of the AC organization is when a determination is made to establish an AC organization to support on-scene Incident Management Teams (IMTs). The RIC determines and designates who will represent EPA and other appropriate organizations within the AC structure.

EXECUTIVE BRIEFING – This is the first activity where the representatives in Area Command are briefed by the RIC on the overall situation which includes:

1. Establish any constraints on authorities;
2. Receive policy guidance and management objectives;
3. Reach agreement on the scope of the job; and
4. Identify AC Post location.

When: Selected Area Commander(s) gather for the first time.
Facilitator: RIC or designee.
Attendees: Selected Area Commanders and deputies.

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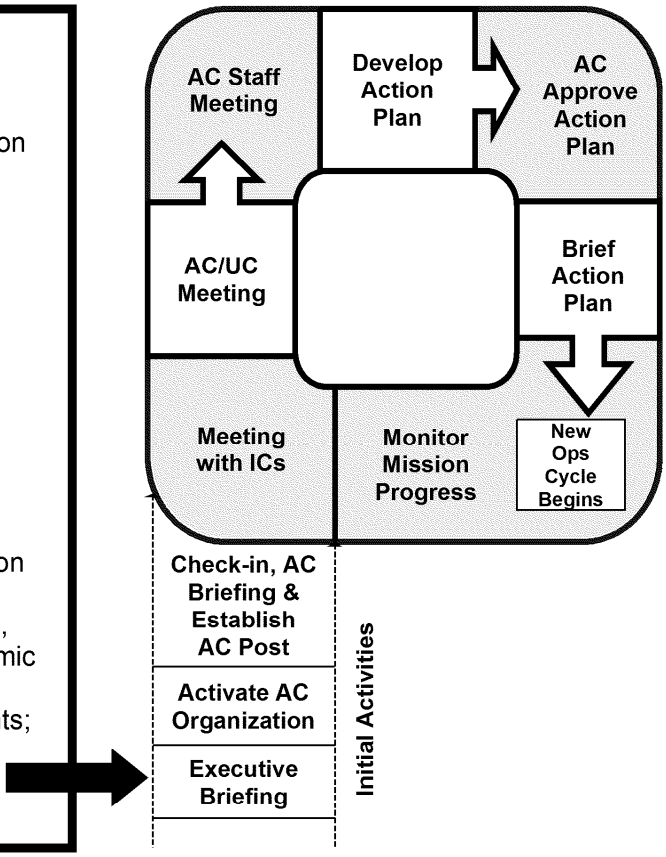
General Tasks

Senior Agency Executives

- Provide situation briefing;
- Establish any constraints on authorities;
- Review agency policies;
- Discuss scope of effort;
- Convey reporting requirements and relationships; and
- Reach agreement on Command Post location.

Area Commander

- Obtain briefing;
- Clarify scope of effort and issues;
- Agree on critical information reporting;
- Define any social, political, environmental and economic issues;
- Identify any cost constraints; and
- Identify ICs.



General Tasks

Area Commanders

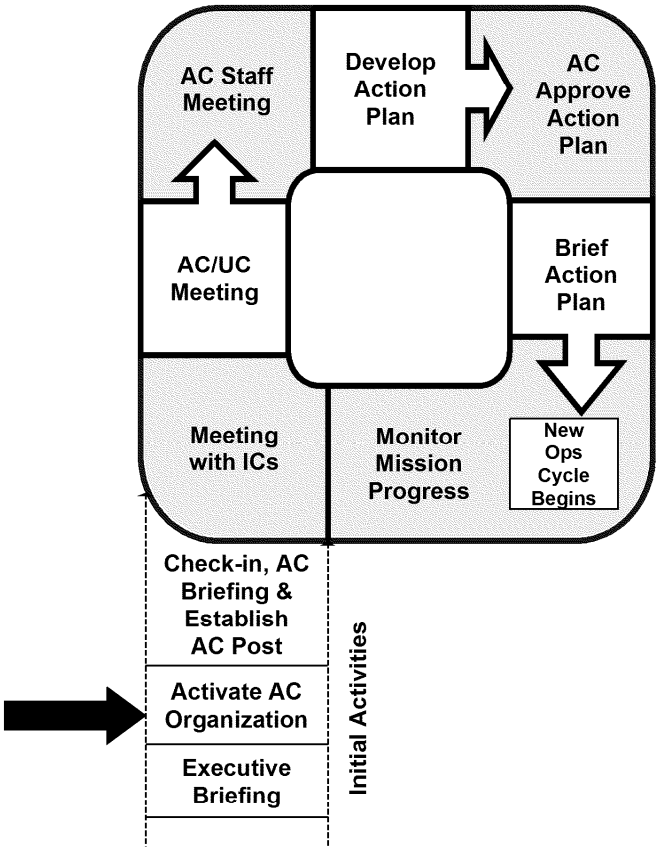
- Identify and agree on AC staffing requirements;
- Agree on who will fill key AC positions;
- Agree on support needs (e.g., computers, printers, communications systems); and
- Develop initial operating procedures

Agenda:

1. Brief on the need and requirements for AC organization.
2. Discuss prior communications between executives and ICs.
3. Brief on current situation.
4. Brief on AC authorities, duties, responsibilities, and management objectives.
5. Discuss overarching political, social, economic, and environmental issues affecting the response.
6. Clarify reporting and briefing requirements and lines of authority.
7. Discuss and reach agreement on overall AC staffing and AC Post location.
8. Discuss plans and agreements that may be in place.
9. Close out meeting with concurrence from Area Commanders that their concerns have been addressed.

ACTIVATE AC ORGANIZATION – Provides Area Commander(s) the opportunity to determine the size of the AC organization based on the scope of effort and agreements reached at the Executive Briefing. This time block could also be used to evaluate the suitability of the proposed AC Post location to meet AC organizational needs.

When: Shortly after the Executive Briefing
Facilitator: Area Commander(s) come to agreement on AC staffing
Attendees: Area Commanders



CHECK-IN, AC BRIEFING & ESTABLISH AREA COMMAND POST – Area Commanders will conduct initial briefing with AC personnel. Briefing will include expectations from Area Commanders and any limitations or issues that the AC will be expected to address. Establishment of the AC Post may also be addressed at this time.

When: At the time AC staff positions are established

Facilitator: Area Commander(s) with participation from AC PSC and AC LSC

Attendees: All AC personnel

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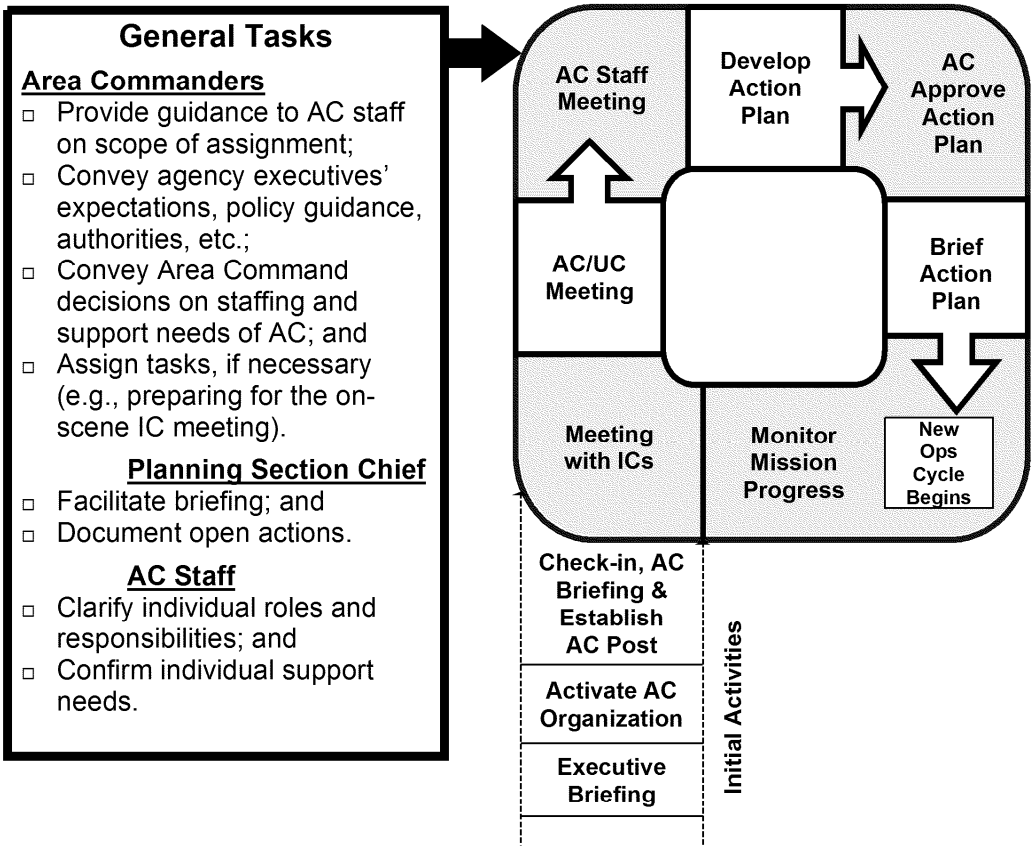


MEETING WITH INCIDENT COMMANDERS – Provides Area Commander(s) the opportunity to meet with on-scene ICs and discuss on-scene ICs' current situation, strategies, and issues.

When: As soon as possible after AC becomes operational

Facilitator: AC PSC

Attendees: Area Commanders, AC PSC, AC LSC, AC FSC, On-scene ICs and their PSCs

General Tasks

Area Commanders

- Clarify AC roles and expectations;
- Provide management objectives;
- Cover AC operating procedures;
- Provide ground rules or procedures for ICs to follow; and
- Area Commanders and ICs reach agreement on division of responsibility (e.g., media relations, stakeholder meetings).

Planning Section Chief

- Provide reporting requirements, formats and time frames; and
- Collect IAPs and/or 201s from each of the incidents.

Logistics Section Chief

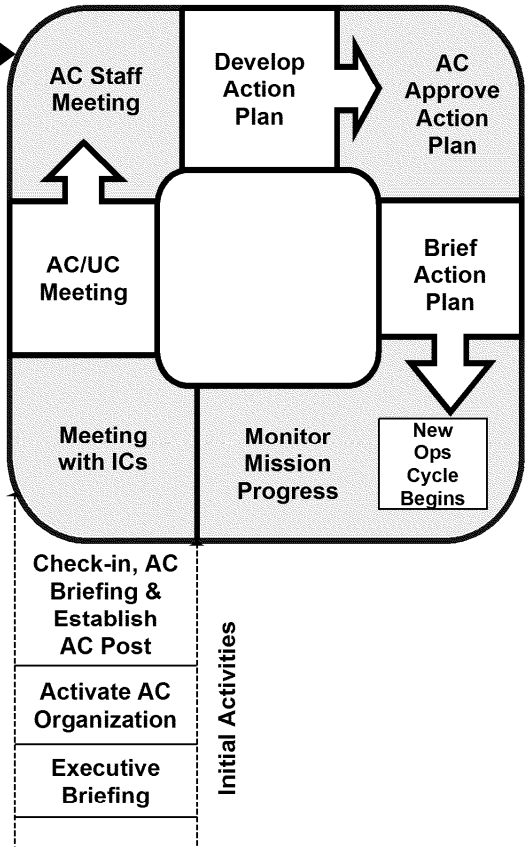
- Provide procedures for ordering specialized or critical resources;
- Explain process for sharing or re-assigning specialized and critical resources; and
- Explain demobilization of specialized and critical resources.

Finance/Admin Section Chief

- Explain process for cost tracking.

Incident Commanders

- Provide overall Situation Report for their individual incident;
- Identify resources at risk;
- Specify current incident objectives;
- Provide response priorities;
- Provide long-term projections and existing and anticipated problems;
- Provide list of resource requirements and shortfalls;
- Identify probability of success if resource needs are met;
- Identify consequences if resource requirements are not met; and
- Identify areas that AC can provide assistance to them (political contacts, VIP visits, etc.).



Agenda:

1. AC PSC brings meeting to order, conducts roll call, and reviews agenda.
2. Area Commander(s) provide opening remarks along with providing policy direction, Executives' expectations, AC interim operating procedures, expectations, and ground rules.
3. AC PSC provides guidance on information reporting to include timeframes, units of measure and formats along with critical information reporting.
4. AC LSC provides guidance on ordering and sharing of specialized and critical resources, including demobilization of these resources.
5. AC FSC provides guidance on cost accounting.
6. ICs report out on their individual situation to include resources at risk, incident objectives, incident priorities, resource requirements, and consequences if resource requirements are not met.
7. Resolve any issues or concerns.
8. AC PSC solicits final comments and adjourns the meeting.

AREA COMMANDERS MEETING

– During this one-hour meeting, the Area Commander(s) will use the information derived from the IC meeting and develop overall strategies, objectives, and priorities, and identify any critical resource needs or issues that the AC will have to address. As needed, Area Commander(s) will establish priorities amongst incidents. Area Commander(s) will also finalize the AC operating procedures.

When: As soon as possible after adjournment of IC meeting

Facilitator: AC PSC

Attendees: Area Commanders, AC PSC, other staff upon Area Commander(s)' request

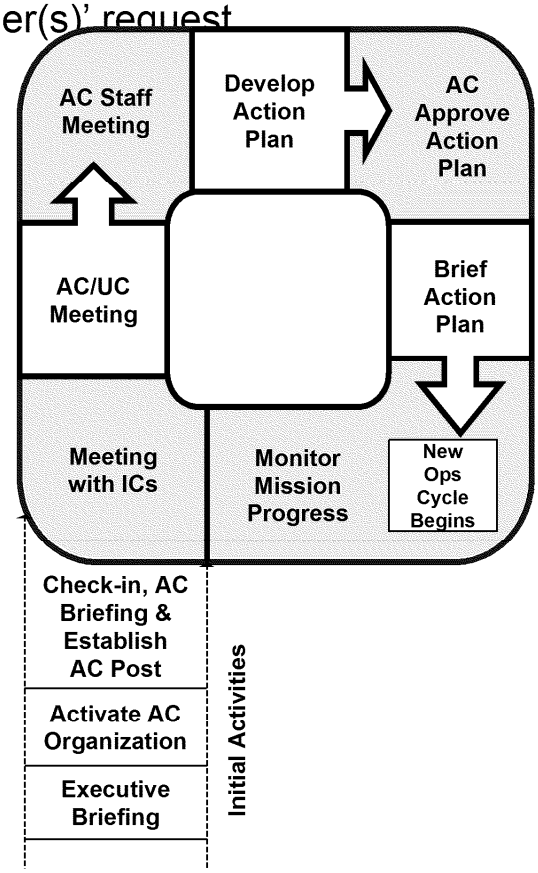
General Tasks

Area Commanders

- Reach agreement on what are critical resources.
- Discuss limitations and constraints.
- Prioritize incidents.
- Develop overall priorities, objectives and strategies.
- Finalize the AC operating procedures, (e.g., core hours of operation, night watch, staffing requirements, meeting schedules, reporting timeframes).
- Identify any specific tasks for AC staff.

Planning Section Chief

- Set up meeting room using meeting room layout.
- Facilitate meeting.
- Ensure meeting documentation.



Agenda:

1. AC PSC brings meeting to order.
2. Area Commander(s) reaches agreement on criteria for identifying critical resources.
3. Area Commander(s) discusses and prioritizes incidents.
4. Area Commander(s) addresses any limitations and constraints.
5. AC PSC facilitates discussion and develops overall response priorities.
6. AC PSC leads discussion on development of strategic objectives.
7. Area Commander(s) finalizes the AC operating procedures (e.g., core hours of operation, night watch, staffing requirements, meeting schedules, reporting timeframes).
8. Area Commander(s) identifies any specific tasks for AC staff.
9. Area Commander(s) addresses any critical issues derived from the IC Meeting or Agency Executive Briefing.

AC STAFF MEETING/BRIEFING – During this one-hour meeting, the Area Commander(s) will present their decisions and management direction to the AC staff. This meeting should clarify and help to ensure understanding among the core AC staff on the decisions, objectives, priorities, procedures and functional assignments (tasks) that the Area Commander(s) has discussed and agreed upon.

When: Following AC meeting

Facilitator: AC PSC

Attendees: Area Commanders and AC staff to include Unit Leaders and technical specialists, if needed

General Tasks

Area Commanders

- Present AC decisions, directions, and priorities;
- Present AC operating procedures;
- Discuss overall response emphasis including any limitations and constraints; and
- Present functional work assignments (tasks).

Planning Section Chief

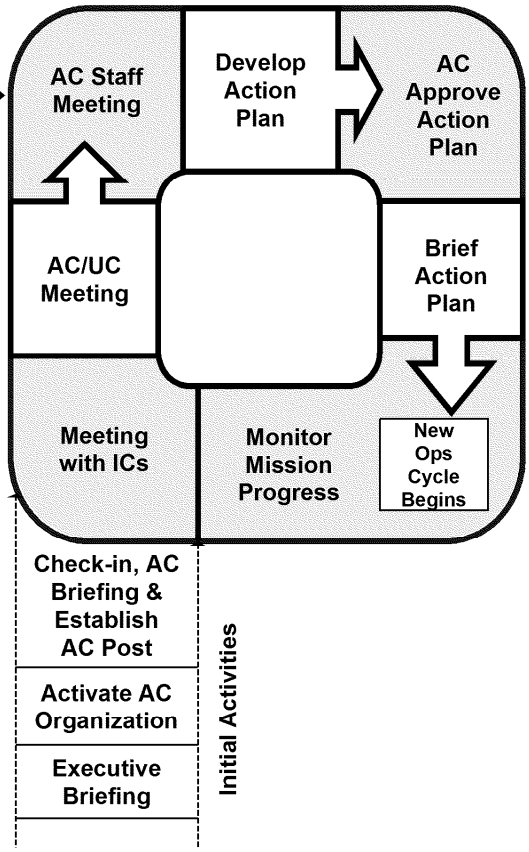
- Set-up meeting/briefing area;
- Facilitate and document meeting.

Situation Unit Leader

- Provide updates on the overall current situation and projections if available.

AC Staff

- Review and clarify functional work assignments (tasks).

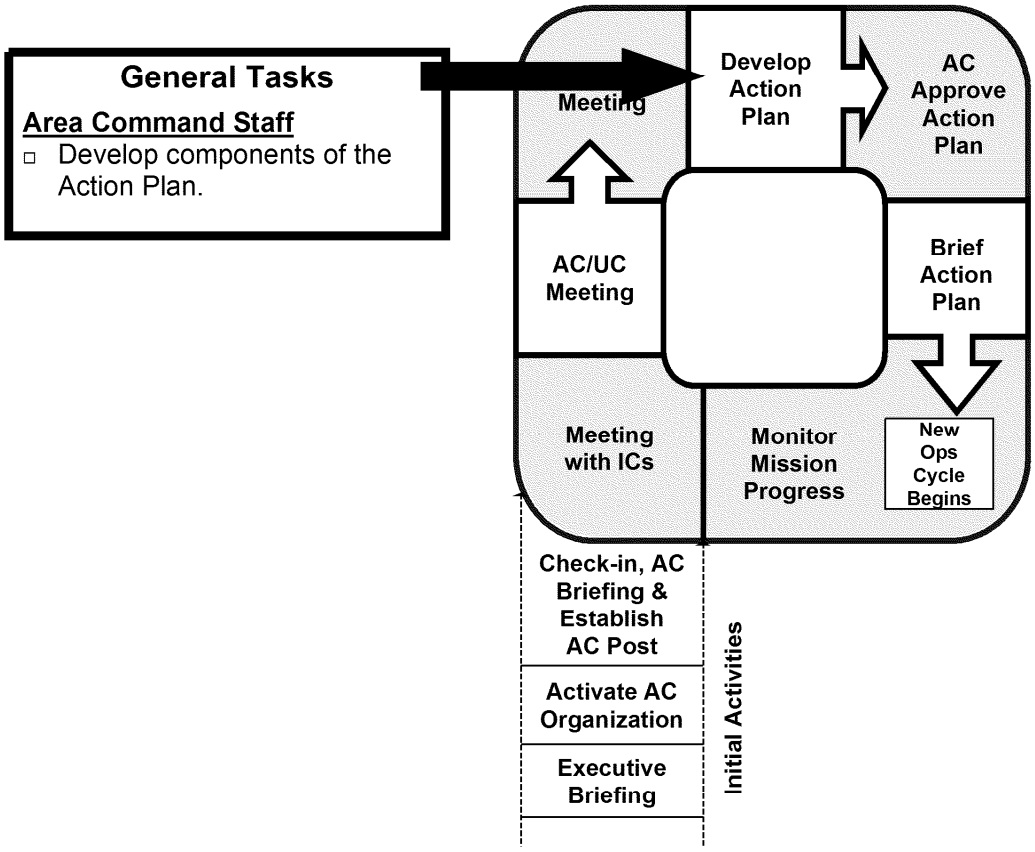


Agenda:

1. AC PSC brings meeting to order, conducts roll call, covers ground rules and reviews agenda.
2. AC SITL conducts situation status briefing.
3. Area Commander(s) provides comments.
4. Area Commander(s) presents:
   a. Decisions, directions, and priorities;
   b. Operating procedures;
   c. Overall response emphasis, including any limitations and constraints; and
   d. Functional work assignments (tasks) to staff members.
5. AC PSC facilitates a short discussion on issues and concerns and adjourns meeting.

DEVELOP ACTION PLAN – During this block of time, AC staff develops components that are needed to be included in the Action Plan. These components must meet the deadlines set by the AC PSC to ensure the Planning Section can assemble the Action Plan. Deadline must be early enough to permit timely AC review, approval and duplication.

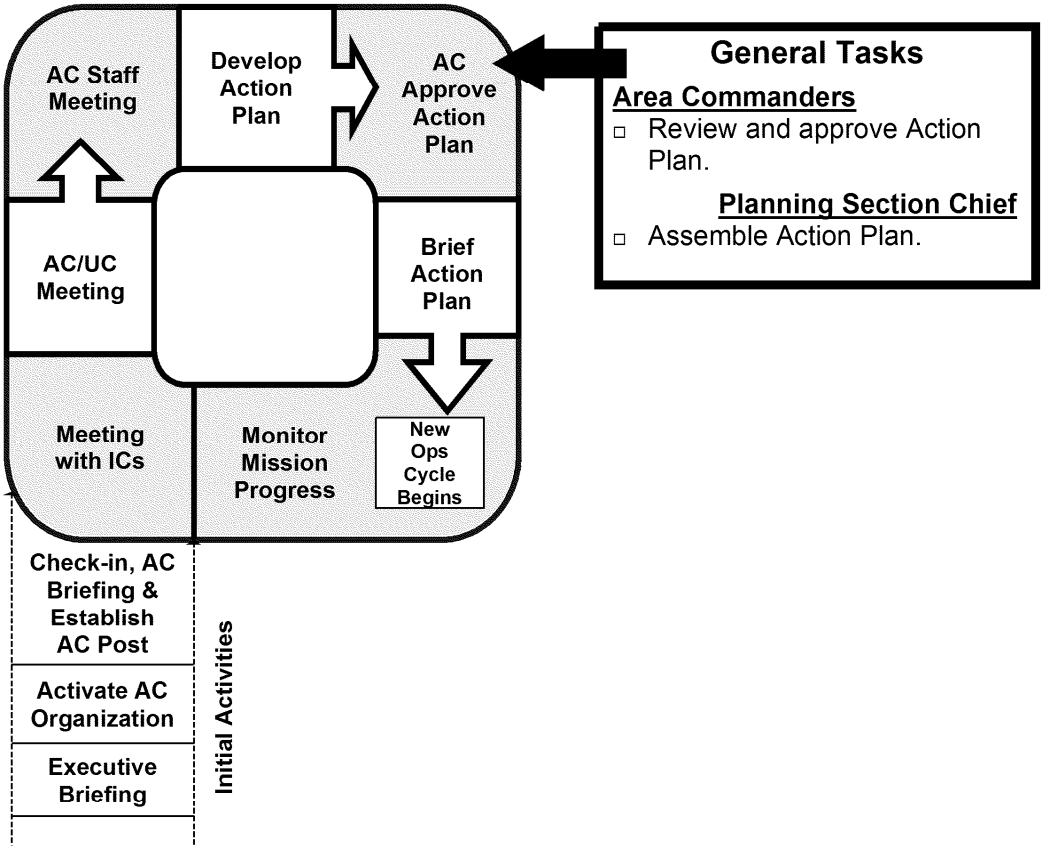
When: Following AC staff meeting
Facilitator: AC PSC facilitates process
Attendees: None. This is not a meeting but a period of time.



ACTION PLAN COMPONENTS	PRIMARY RESPONSIBILITY
1. Priorities & Objectives (ICS AC202)	AC RESL
2. Organization List/Chart (ICS AC207)	AC RESL
3. Critical Resource Summary (ICS AC215)	AC RESL
4. Meeting & Briefing Schedule (ICS AC230)	AC SITL
5. Communication Plan (ICS AC205)	AC COML
6. Information Management Plan	AC PIO
7. Critical Information Reporting	AC SITL
8. Staffing Schedule	AC RESL
9. Policies, Procedures & Decisions	AC PSC

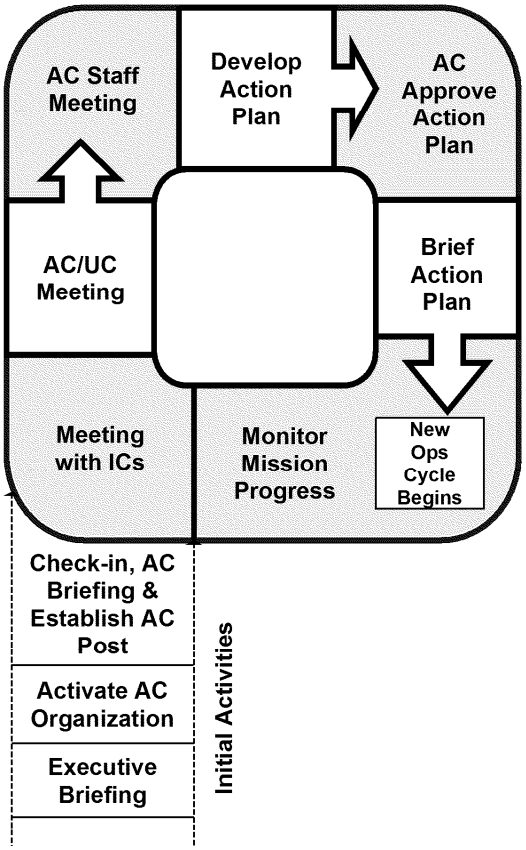
ACs APPROVE ACTION PLAN – During this block of time, the Planning Section assembles Action Plan, reviews content, makes adjustments if necessary, and provides to Area Commander(s) for review and approval. Following approval, required copies should be duplicated for distribution.

When: Following Action Plan Development
Facilitator: AC PSC and Area Commanders facilitate process
Attendees: None. This is a block of time.



BRIEF ACTION PLAN – This 30-minute or less briefing presents the Action Plan to the AC staff and ICs. Briefing to on-scene ICs may be accomplished by teleconferencing or some other mechanism. Copies are either faxed or sent electronically to ICs and Agency Executives.

When: At or as near as possible to AC shift change
Facilitator: AC PSC
Attendees: All AC staff and if possible ICs, and Agency Executives



General Tasks

Area Commanders
- Provide guidance/clarification.

Planning Section Chief
- Set up briefing area;
- Prepare briefing materials;
- Facilitate Briefing; and
- Provide status on critical resources.

Situation Unit Leader
- Provide situation briefing; and
- Review status of open actions/tasks.

Logistics Section Chief
- Address logistical support/service issues.

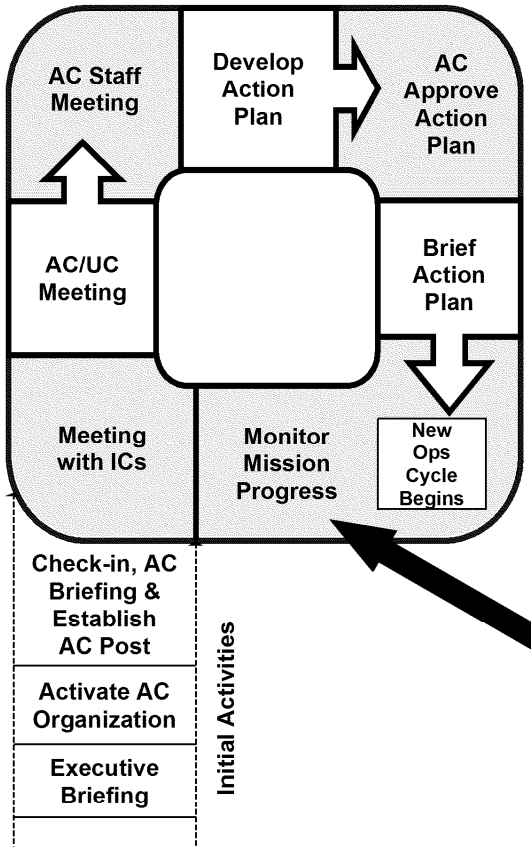
Finance/Admin Section Chief
- Address finance/admin issues.

Agenda:

1. AC PSC opens meeting, conducts roll call and reviews agenda.
2. AC SITL conducts situation status briefing and provides projections as needed.
3. Area Commander(s) provides opening remarks.
4. AC PSC presents Action Plan.
5. AC LSC presents status of specialized and critical resources.
6. AC FSC presents status of cost tracking and other cost accounting issues.
7. AC PSC conducts round robin to clarify and resolve any open issues with participants.
8. AC PSC adjourns briefing.

MONITOR MISSION PROGRESS

The Area Commander(s) should continuously monitor ongoing operations via the ICs/IMTs to help adjust planning for future operations. The Area Commander(s) should communicate with the ICs and assist as needed with support from AC staff.



General Tasks

Area Commanders

- Keep REOC informed of progress and issues;
- Evaluate overall AC effectiveness;
- Resolve problems as they occur;
- Follow up on staff work assignments / open actions;
- Communicate with ICs and assists as needed;
- Attend planned meetings and briefings;
- Evaluate staff effectiveness and order additional resources as needed; and
- Provide guidance/clarification.

Planning Section Chief

- Evaluate AC Planning Section effectiveness;
- Evaluate staffing requirements for next operational period;
- Prepare briefing materials;
- Conduct a Planning Section meeting;
- Ensure that document control system is functioning properly; and
- Provide status on critical resources.

Logistics Section Chief

- Addresses ongoing logistical support/service issues;
- Ensure appropriate communication is in place;
- Evaluate space requirements and make adjustments as needed;
- Monitor Area Command Post security;
- Source critical and specialized resources; and
- Evaluate logistics staffing needs and order as needed.

General Tasks

Finance/Admin Section Chief

- Continue to address finance/admin issues;
- Investigate any unusual claims and brief Command;
- Develop cost sharing agreements as needed;
- Monitor AC procurement procedures;
- Brief Command on any unusual high cost items being requested.

APTER 14

BSTANCES RESPONSE

EPA routinely responds to releases of hazardous

substances. Typically these responses are small and are easily handled by a Federal On-Scene Coordinator (OSC) with the support of response contractors, Special Teams, and/or other EPA personnel. In many cases, state and/or local resources assist with direct or indirect response support. In other instances, EPA may provide technical support to other Federal, state, local, or tribal agencies in response to releases of hazardous substances. EPA may also serve as either the Incident Commander (IC) or, more frequently, within the Unified Command (UC) when needed due to the magnitude of the situation, its technical complexity, or the unavailability of other response resources.

The majority of hazardous substance releases are small events that will not and should not result in a response beyond that of an initial or reinforced response organization. The OSC should have knowledge of the local government response capabilities and/or be familiar with local responders, as this will affect the degree of leadership and control that the OSC will be expected to take in hazardous substance/material events. Some first responders may only be trained to the awareness level which will allow them to recognize the presence of hazards, protect themselves, secure the site, and to call for specialized personnel. Do not assume that first responders have adequately assessed, contained, or completely controlled the release.

In areas where the state and local government have a strong hazardous substance/materials response program, EPA may be primarily in a support role during the emergency phases. In areas where there is less hazardous substance response capability, EPA will be expected to

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take a much stronger leadership role.

In this regard, there may also be reasons to expand the UC beyond the Federal OSC, state/tribal OSC, Responsible Party (RP) participation, and local jurisdiction. The UC represented in this chapter reflects the possible levels of participation that may be seen in some locations and situations for hazardous substance incidents. Area and regional planning allow OSCs to meet with other responders in their jurisdictions. These opportunities should be used to determine the response capabilities and personalities that may be involved in responses in your region.

There are different terms used to describe hazardous materials throughout the transportation, response, and regulatory communities. Throughout this Incident Management Handbook (IMH), the term “hazardous substances” is intended to refer to “hazardous substances, pollutants, or contaminants” as defined under the National Oil and Hazardous Substances Pollution Contingency Plan (NCP).

The term “OSC” is used to refer to the Federal On-Scene Coordinator, in accordance with the NCP. EPA uses the designation “OPS” to refer to the Operations Section Chief position in order to avoid confusion with the Federal On-Scene Coordinator (OSC) designation in regulation.

Finally, the designation “RP” is used for consistency with the United States Coast Guard (USCG) IMH, and includes both Responsible Parties under the Oil Pollution Act (OPA) and Potentially Responsible Parties (PRP) under the Comprehensive Environmental Response, Compensation,

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and Liability Act (CERCLA).

It is impossible to address the full range of possible Incident Command System (ICS) organizations that may be used by EPA in responding to hazardous substance/material (hazmat) releases. Therefore, this chapter will use three possible scenarios to present the modular development of the ICS organization. The organization charts presented in this chapter highlight the positions/units that are critical for a hazmat response; empty boxes are shown to indicate that the complete ICS org chart may include additional positions. The first scenario, with an ICS organizational chart depicted in Figure 14-1, involves an EPA-led response to a fairly simple hazardous substances incident (for example, one in which only an EPA OSC and his/her contractors respond). The second, with an ICS organizational chart depicted in Figure 14-2, involves an EPA-led response to a fairly complex hazardous substance release, but without significant non-hazardous substance issues (i.e., all response activities are geared towards the hazardous substances incident). Finally, the third scenario, with an ICS organization chart depicted in Figure 14-3, involves a complex incident in which the hazardous substance response represents just a fraction of the ongoing activities (for example, a train derailment involving a chlorine release impacting a nearby community). In such an incident, it is expected that a Hazardous Substance/Material (Hazmat) Branch or Group will be created to provide the necessary supervision and control for the essential functions required at virtually all hazardous substances incidents. The Hazmat Branch Director, if activated, or Group Supervisor will direct the primary functions and supervise all resources that have a direct involvement with hazardous substances. The

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presented organizational structures also reflect the modular development of a hazardous substances release ICS organization, in that the organization expands and contracts in order to accommodate the increasing complexity and response resources associated with the three responses, maintaining the span of control of each supervisor within the acceptable range.

While not shown in any of the presented ICS organizations, it should be noted that, in some especially complex incidents, a modified planning structure can be adopted under the National Incident Management System (NIMS), with detailed action planning done within the Hazmat Branch. If an incident becomes so large that there is no logical set of objectives that pertain to the entire incident, or if the preparation and/or distribution of the Incident Action Plan (IAP) cannot be feasibly accomplished within the required timeframe, then Branch tactical planning may be appropriate. In such a case, the Environmental Unit would likely be moved to the Hazmat Branch. In such a case, the Planning Section would have to ensure that inter-Branch coordination takes place whenever necessary. When a hazardous substance incident is large enough in scope and/or complexity, both the Operations and Planning Sections will be fully engaged. The Operations Section will coordinate and carry out tactics for the current operational period while the Planning Section is will work on plans for the next operational period and beyond.

Due to the presence of hazardous substances/materials in a typical EPA response, the Agency expects to typically create an Environmental Unit within the Planning Section, as described in NIMS, to properly support the decision making capability of the ICS structure during a major

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incident. Planning, research, analytical data management, assessment, and other science or technical functions may not be able to be addressed by the responders as they focus on their field activities. The Environmental Unit would assemble and coordinate environmental stakeholders and needed technical specialists to provide scientific advice on various environmental and health issues and provide technical expertise, work products, plans or deliverables.

Since the Logistics Section and Finance/Administration Section, if formed during a hazardous substance response, will reflect the same functional requirements as in the generic ICS organization, they have not been included in the organizational charts for this chapter.

UNIFIED COMMAND (UC)

Hazardous materials incidents will usually be managed under UC principles. Thus—in addition to EPA and state/tribal and/or local environmental agencies—fire, law enforcement, and public health agencies will also have some statutory jurisdiction and functional responsibility to respond. Most hazardous substance emergencies will involve both environmental and public safety components. The best method of ensuring effective information flow and coordination between the responding agencies at the scene of a multiagency incident is to establish an Incident Command Post (ICP) and the use of a UC. Each key response agency should provide a representative to remain at the ICP who will have authority to speak for and commit agency resources. The RP may participate in the UC if they have resources involved in the response or specific information needed to facilitate response activities.

FIGURE 14-1: EPA-LED RESPONSE (BASIC STRUCTURE)

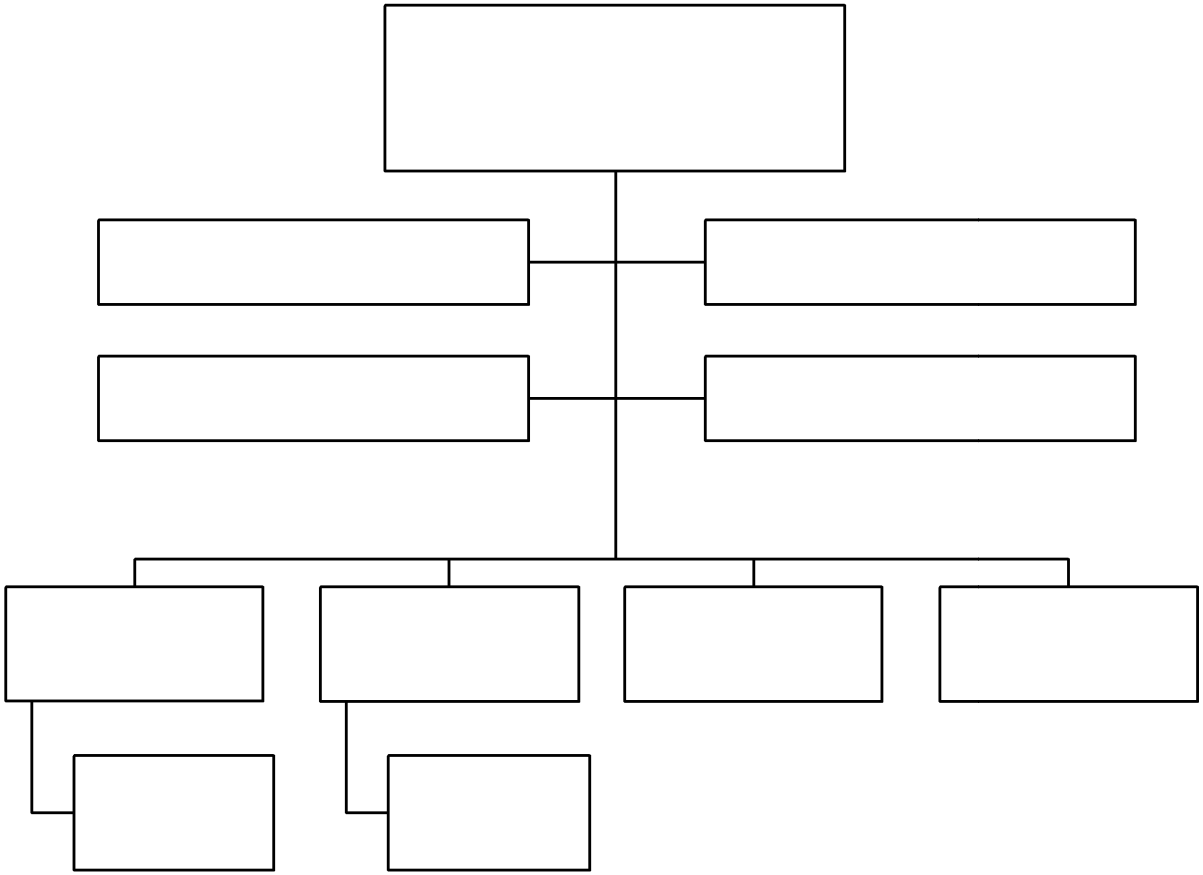

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FIGURE 14-2: EPA-LED RESPONSE (COMPLEX STRUCTURE)

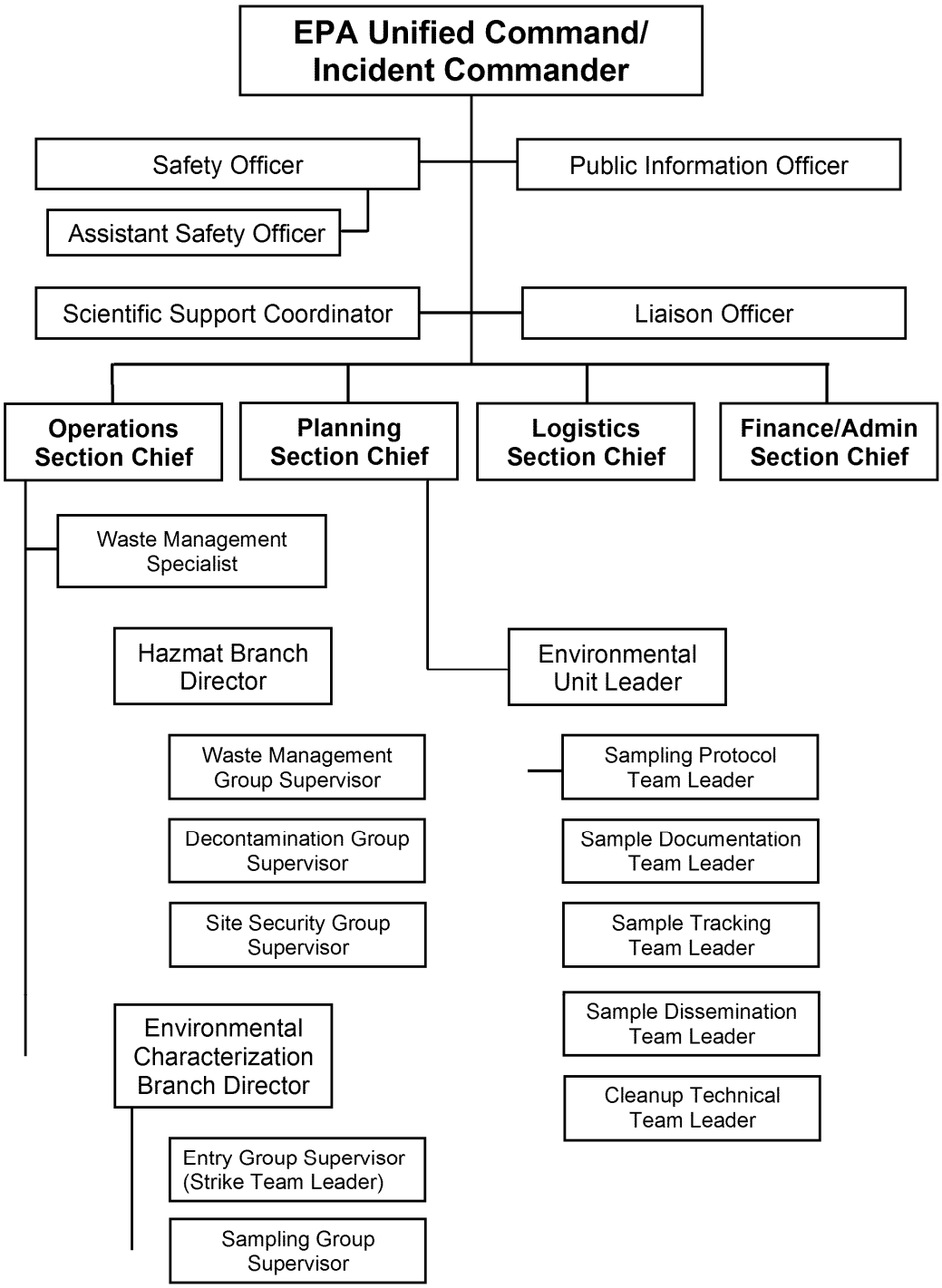
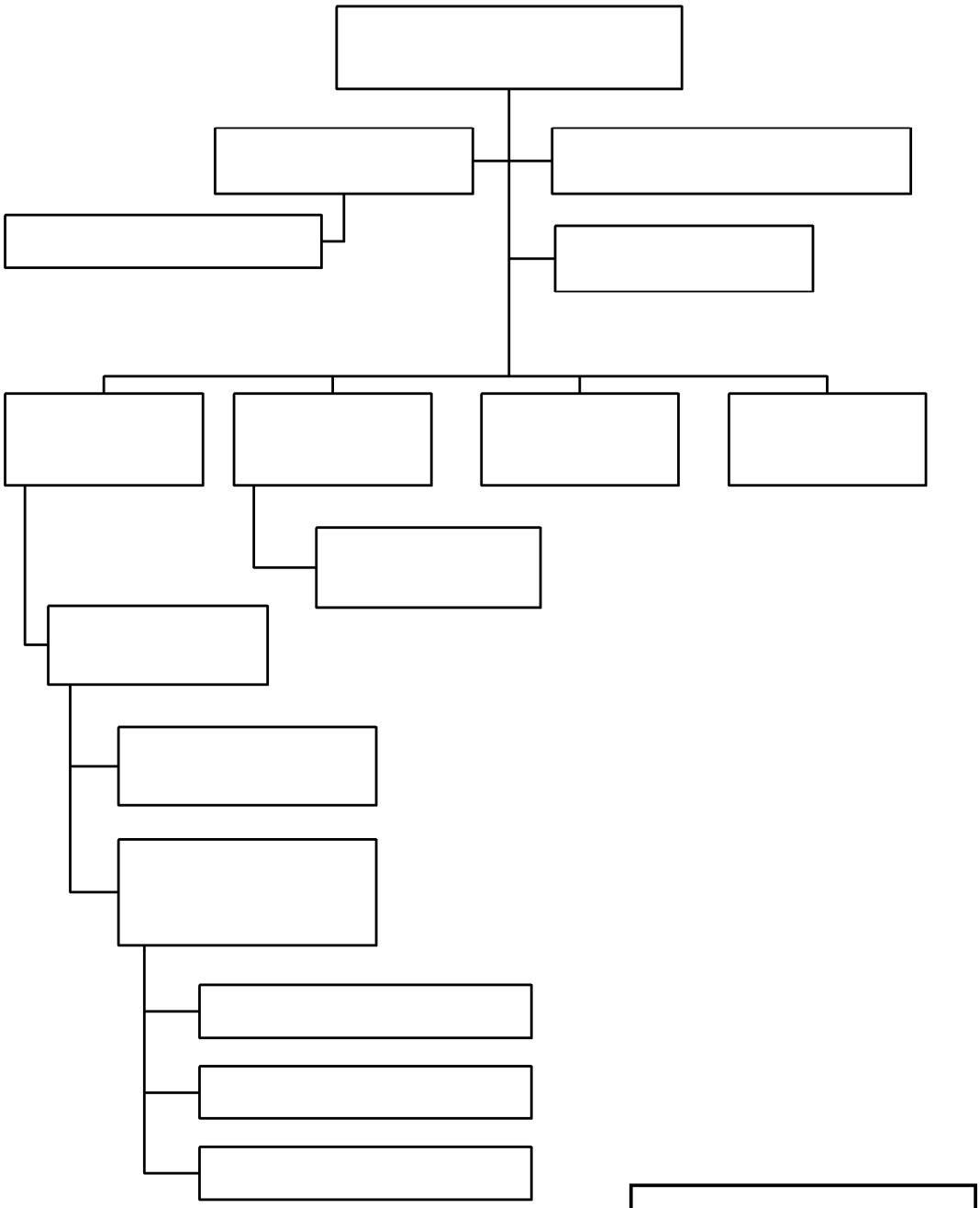


FIGURE 14-3: MULTIAGENCY RESPONSE TO A MULTI-HAZARD INCIDENT



[1] EPA may be expected to support this function.

HAZARDOUS SUBSTANCE/MATERIA
RELEASE-SPECIFIC ICS POSITIONS

DESCRIPTIONS

Only those positions and tasks specific and unique to hazardous substance/material release response missions will be described in this section. Persons assigned to positions common and consistent with the NIMS organization should refer to Chapters 7 through 11 of this IMH for their position/task description checklists.

SAFETY OFFICER (SO) – In addition to the specific tasks assigned to the SO, the SO for a hazardous substance incident will use the following guidance when preparing the Site Safety Plan:

a. Review SO Responsibilities (page 7-9);
b. Assign site safety responsibility;
c. Establish perimeter and restrict access;
d. Characterize site hazards;
e. Establish control zones;
f. Assess site-specific training requirements for responders;
g. Ensure safety briefings;
h. Select personal protective equipment (PPE);
i. Establish decontamination stations;
j. Establish Emergency Medical Plan; and
k. Maintain Unit/Activity Log (ICS 214 form).

ASSISTANT SAFETY OFFICER (ASO) –The ASO coordinates with the Hazmat Branch Director. The ASO coordinates safety-related activities directly relating to the Hazmat Branch operations as mandated by 29 Code of

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Federal Regulations (CFR) Part 1910.120 and applicable state and local laws. The person in this position advises the Hazmat Branch Director on all aspects of health and safety and has the authority to stop or prevent unsafe acts. In a multi-activity incident the ASO does not act as the Safety Officer for the overall incident. ASO tasks include:

a. Review SO Responsibilities (page 7-9);
b. Obtain a briefing from the Hazmat Branch Director;
c. Participate in the preparation and implementation of a Site Safety and Control Plan;
d. Advise the Hazmat Branch Director of deviations from the 1910.120-compliant Health and Safety Plan (HASP) and/or Site Safety and Control Plan (ICS 208-HM form) or any dangerous situations;
e. Alter, suspend, or terminate any activity that is judged to be unsafe;
f. Ensure the protection of personnel from physical, environmental, and chemical hazards/exposures;
g. Ensure the provision of required emergency medical services for assigned personnel and coordinate with the Medical Unit Leader (MEDL);
h. Ensure that medical related records for the Hazmat Branch personnel are maintained; and
i. Maintain Unit/Activity Log (ICS 214 form).

WASTE MANAGEMENT SPECIALIST – The Waste Management Specialist is responsible for providing the OPS with a Waste Management Plan that details the collection, sampling, monitoring, temporary storage, transportation, recycling, and disposal of all anticipated response wastes. Additional tasks include:

a. Review Common Responsibilities (page 3-1);
b. Determine resource needs;
c. Participate in Planning Meetings as required;
d. Develop a Pre-Cleanup Plan and monitor pre-cleanup operations, if appropriate;
e. Develop a detailed Waste Management Plan;
f. Calculate and verify the volume of waste collected;
g. Provide status reports to appropriate requesters; and
h. Maintain Unit/Activity Log (ICS 214 form).

HAZARDOUS SUBSTANCE/MATERIAL (HAZMAT) BRANCH DIRECTOR – The Hazmat Branch Director is responsible for the implementation of the phases of the IAP dealing with the Hazmat Branch operations. The Hazmat Branch Director is responsible for the assignment of resources within the Hazmat Branch, and reporting on the progress of control operations and the status of resources within the Branch. The Hazmat Branch Director directs the overall operations of the Hazmat Branch; additional tasks include:

a. Review Branch Director Responsibilities (page 8-11);
b. Ensure the development of Control Zones and Access Control Points and the placement of appropriate control lines;
c. Evaluate and recommend public protection action options to the OPS;
d. Ensure that current weather data and future weather predictions are obtained;
e. Establish environmental monitoring of the hazard

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site for contaminants;

f. Ensure that a 1910.120-compliant HASP and/or Site Safety and Control Plan (ICS 208-HM form) is developed by the SO/ASO and implemented;

g. Ensure safety meetings are conducted with the Hazmat Branch;

h. Participate, when requested, in the development of the IAP;

i. Ensure that recommended safe operational procedures are followed;

j. Coordinate with the SO to ensure that the proper PPE is selected and used;

k. Coordinate with the Incident Commander (IC) to ensure that the appropriate notifications are made; and

l. Maintain Unit/Activity Log (ICS 214 form).

WASTE MANAGEMENT GROUP SUPERVISOR – The Waste Management Group Supervisor is responsible for coordinating the onsite activities of personnel engaged in collecting, storing, transporting, and disposing of waste materials. Depending on the size and location of the spill, the Waste Management Group may be further divided into Teams, Task Forces, and Single Resources. The Group Supervisor's tasks include:

a. Review Division/Group Supervisor Responsibilities (page 8-12);

b. Implement the waste management portion of the IAP;

c. Ensure compliance with all hazardous waste laws and regulations;

d. Maintain accurate records of recovered material; and
e. Maintain Unit/Activity Log (ICS 214 form).

DECONTAMINATION GROUP SUPERVISOR – The Decontamination Group Supervisor is responsible for the operations of the decontamination element and for providing decontamination, as required by the IAP; additional tasks include:

a. Review Division/Group Supervisor Responsibilities (page 8-12);
b. Establish the Contamination Reduction Zone(s);
c. Identify contaminated people and equipment;
d. Supervise the operations of the decontamination element in the process of decontaminating people and equipment;
e. Establish decontamination procedures for all site areas (may include indoor and outdoor decontamination) consistent with the IAP incident objectives;
f. Maintain control of movement of people and equipment within the Contamination Reduction Zone;
g. Maintain communications and coordinate operations with the Entry Team Leader;
h. Coordinate handling, storage, and transfer of contaminants within the Contamination Reduction Zone; and
i. Maintain Unit/Activity Log (ICS 214 form).

SITE SECURITY GROUP SUPERVISOR – The Site

Security Group Supervisor is responsible for the control of the movement of all people and equipment through appropriate access routes at the hazard site, and ensures that contaminants are controlled and records are maintained. Additional tasks include:

a. Review Division/Group Supervisor Responsibilities (page 8-12);
b. Organize and supervise assigned personnel to control access to the hazard site;
c. Oversee the placement of the Exclusion Control Line and the Contamination Control Line;
d. Ensure that appropriate action is taken to prevent the spread of contamination;
e. Track the movement of persons passing through the Contamination Control Line to ensure that long-term observations are provided;
f. Coordinate with the Medical Group for proper separation and tracking of potentially contaminated individuals needing medical attention;
g. Maintain observations of any changes in climatic conditions or other circumstances external to the hazard site;
h. Maintain communications and coordinate operations with the Entry Team Leader;
i. Maintain communications and coordinate operations with the Decontamination Group Supervisor; and
j. Maintain Unit/Activity Log (ICS 214 form).

ENVIRONMENTAL CHARACTERIZATION BRANCH DIRECTOR/GROUP SUPERVISOR – This Branch reports

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to the OPS. In a multiagency response, the Branch may be organized as a Group reporting to the Hazmat Branch under the Operations Section. Overall responsibilities will remain consistent whether organized as a Branch or Group. The Branch is responsible for the phases of the IAP dealing with characterization and identification of site hazards and extent of contamination. The Branch/Group will typically consist of supporting Groups and Teams capable of conducting or supporting multimedia monitoring and sampling in all areas of the incident. Additional tasks include:

a. Review Branch Director Responsibilities (page 8-11) or Division/Group Supervisor Responsibilities (page 8-12);
b. Participate, when requested, in the development of the IAP;
c. Ensure the development of Control Zones and Access Control Points and the placement of appropriate control lines;
d. Establish environmental monitoring and sampling of contaminants for all site areas consistent with the IAP incident objectives;
e. Communicate data required for immediate operations to onsite operational and safety personnel;
f. Coordinate all monitoring and sampling activities with Entry Group, Field Analytical Team, Monitoring Group, and Sampling Group;
g. Provide analytical support and coordination for all environmental sampling, monitoring, and analyses;
h. Coordinate all sampling, monitoring, and analyses, and associated data, with the Environmental Unit

Analytical Coordinator, if established;

i. Maintain communications and coordinate operations with the Resource Protection Group, Waste Management Group, Decontamination Group, and Site Security Group to ensure ongoing operations mesh with overall incident objectives;

j. Maintain communications with the Environmental Unit, if established, and other technical specialists involved with evaluation or utilization of data and information generated by Branch operations;

k. Coordinate with the SO to ensure proper PPE is selected and used; and

l. Maintain Unit/Activity Log (ICS 214 form or equivalent).

ENTRY GROUP SUPERVISOR/STRIKE TEAM LEADER

This Group/Team, led by a Group Supervisor or Strike Team Leader, typically reports to the Environmental Characterization Branch Director. The Entry Group/Strike Team is responsible for the overall entry operations of assigned personnel within the Exclusion Zone; additional tasks include:

a. Review Division/Group Supervisor Responsibilities (page 8-12) or Strike Team/Task Force Leader Responsibilities (page 8-14);

b. Supervise entry operations;

c. Recommend actions to mitigate the situation within the Exclusion Zone;

d. Carry out actions, as directed by the Environmental Characterization Branch Director;

e. Maintain communications and coordinate operations with the Decontamination Group

Supervisor;

f. Maintain communications and coordinate operations with the Site Access Control Team Leader;

g. Maintain communications and coordinate operations with any technical specialists supporting the Branch operations as specified in the IAP;

h. Maintain control of the movement of people and equipment within the Exclusion Zone;

i. Direct rescue operations, as needed, in the Exclusion Zone; and

j. Maintain Unit/Activity Log (ICS 214 form).

SAMPLING GROUP SUPERVISOR – The Sampling Group is assigned to the Operations Section because of the immediate communication and coordination they must have with the other field Groups. The Field Sampling Group will normally include an Air Monitoring Strike Team, Water Sampling Strike Team, and a Soil Sampling Strike Team. They will normally be responsible for perimeter monitoring and sampling, and will either coordinate sampling within the hot zone and warm zones with the Entry Group, or if properly trained and outfitted with PPE, they may take samples within the hot/warm zones themselves. Other responsibilities include:

a. Review Division/Group Supervisor Responsibilities (page 8-12);

b. Conduct all sampling required for immediate operation activity and communicate sampling data, such as results of routine air monitoring, to onsite operational and safety personnel;

c. Conduct air, water, and soil sampling as directed

by the regulatory agencies and other interested parties through the Sampling Protocol Team;

d. Ensure that all samples are obtained following appropriate sample protocol and other special instructions they may obtain;

e. Ensure that all samples taken are properly documented and follow the chain-of-custody procedures;

f. Ensure that the samples are properly transferred to the Sample Documentation and Tracking Teams for proper documentation, analysis, and final dissemination; and

g. Maintaining Unit/Activity Log (ICS 214 form).

ENTRY TEAM LEADER –The Entry Team Leader is responsible for the overall entry operations of assigned personnel within the Exclusion Zone; Additional tasks include:

a. Review Strike Team/Task Force Leader Responsibilities (page 8-14);

b. Supervise entry operations;

c. Recommend actions to mitigate the situation within the Exclusion Zone;

d. Carry out actions as directed by the Hazmat Branch Director;

e. Maintain communications and coordinate operations with the Decontamination Group Supervisor;

f. Maintain communications and coordinate operations with the Site Access Control Team Leader;

g. Maintain communications and coordinate operations with the appropriate technical specialist;
h. Maintain control of the movement of people and equipment within the Exclusion Zone;
i. Direct rescue operations, as needed, in the Exclusion Zone; and
j. Maintain Unit/Activity Log (ICS 214 form).

MONITORING TEAM LEADER – The Monitoring Team is assigned to the Environmental Characterization Group under the Operations Section. The Team is established to ensure the equipment used to monitor the released hazardous material is functioning correctly and the information is relayed to the Environmental Characterization Group in accordance with objectives. Additional tasks include:

a. Review Strike Team/Task Force Leader Responsibilities (page 8-14);
b. Ensure any readings that indicate an immediate health risk to responders are reported immediately to the Entry Team, the SO, and the Environmental Characterization Group Supervisor;
c. Ensure equipment is calibrated and operating within the manufacturer's parameters;
d. Ensure that the equipment used to monitor the hazardous material is appropriate and the information adequately characterizes the material regardless of the impacted medium;
e. If the equipment readings are not available using a remote monitor, obtain direct readings as needed;
f. Report equipment problems immediately to the Environmental Characterization Group Supervisor;

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g. Relay requests for additional equipment to the RESL following approval from the Environmental Characterization Group Supervisor and the OPS;
h. Recover, decontaminate, and return equipment to inventory following the incident; and
i. Maintain Unit/Activity Log (ICS 214 form).

SAMPLING TEAM LEADER – The Sampling Team Leader reports to the Environmental Characterization Group Supervisor in a multiagency response to a multi-hazard incident. The Sampling Team Leader will conduct perimeter sampling and coordinate on additional sampling locations with the Entry Team and Monitoring Team Leaders. Other responsibilities include:

a. Review Strike Team/Task Force Leader Responsibilities (page 8-14);
b. Conduct sampling required for immediate operational activities;
c. Commutate sampling data results with Group Supervisor;
d. Ensure all samples are obtained using appropriate protocol;
e. Ensure samples are properly documented and follow the chain-of-custody procedures;
f. Ensure that the samples are properly documented; and
g. Maintain Unit/Activity Log (ICS 214 form).

ENVIRONMENTAL UNIT LEADER (ENVL) – In addition to the responsibilities outlined in Chapter 9, this position provides technical information and assistance to the Hazardous Substances/Material Branch using various

reference sources such as computer databases, technical journals, and phone contact with facility representatives. Tasks include:

a. Review ENVL Responsibilities (page 9-11);
b. Obtain a briefing from the Planning Section Chief (PSC);
c. Provide technical support to the Hazmat Branch Director;
d. Maintain communications and coordinate operations with the Entry Team Leader, Scientific Support Coordinator (SSC), and Environmental Characterization Branch;
e. Provide and interpret environmental monitoring information;
f. Provide for analysis of hazardous material samples. Determine PPE compatibility to hazardous material;
g. Provide technical information on the incident for documentation;
h. Coordinate the release of technical information with public and private agencies (e.g., Agency for Toxic Substances and Disease Registry (ATSDR), state Public Health Department, state Department of Food and Agriculture, National Response Team (NRT));
i. Assist the Planning Section with projecting the potential environmental effects of the release;
j. Coordinate the release of information with the IC, the SSC, the Headquarters (HQ) Environmental Unit, and the HQ PIO Unit led by Office of External Affairs and Environmental Education (OPA)

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personnel; and

k. Maintain Unit/Activity Log (ICS 214 form).

The following Teams may be organized under the Environmental Unit.

SAMPLING PROTOCOL TEAM LEADER – During a significant hazardous substance/material release incident, there will be numerous requirements for sampling under the ICS UC umbrella. Unless control is taken immediately, there is the possibility for each entity with regulatory or legal interest to begin a sampling regimen independent of each other. The Sampling Protocol Team under the Planning Section would be responsible for:

a. Review Strike Team/Task Force Leader Responsibilities (page 8-14);
b. Determine the overall sampling protocol for the incident;
c. Coordinate with the interested parties on what analysis is required for overall samples;
d. Coordinate procedures for split samples between all parties;
e. Provide special instructions to the field sampling Teams operating under the Operations Section;
f. Coordinate with appropriate agencies and the RP, determine independent laboratories to be used for analysis, and coordinate the contracting of their services with the Logistics Section and Finance/Administration Section;
g. Provide specific special instructions to the laboratories for analytical work; and
h. Maintain Unit/Activity Log (ICS 214 form).

SAMPLE DOCUMENTATION TEAM LEADER – During a significant hazardous substance/material release incident there is the potential for thousands of samples to be taken and analyzed. The Sample Documentation Team will coordinate with the Documentation Unit and will assist that Unit with ensuring that sample analyses are maintained as part of the historical record.

SAMPLE TRACKING TEAM LEADER – As indicated above for sample documentation, there is the possibility of thousands of samples to be taken for analysis during a significant hazardous substance/material release incident. The Sample Tracking Team will be responsible for:

a. Review Strike Team/Task Force Leader Responsibilities (page 8-14);
b. Ensure that all samples are collected from Field Sampling Teams;
c. Coordinate preferred turnaround times for specific samples being analyzed;
d. Coordinate with OPS to ensure that proper chain-of-custody documents are prepared and logged for all samples;
e. Assign control numbers to all samples;
f. Ensure samples are properly transferred to the appropriate laboratory, and documented;
g. Track samples to ensure that sample analysis is completed according to requested schedule, and determine reasons for delays; and
h. Maintain Unit/Activity Log (ICS 214 form).

SAMPLE DISSEMINATION TEAM LEADER – During a

significant hazardous substance/material release, there are many occasions when several parties will need the information obtained from a sample analysis. It will be the responsibility of this Team to ensure that all parties with a legitimate need for a copy of an analysis obtain it as soon as the information is available. They will coordinate this activity with the Sample Documentation Team and the Sample Tracking Team. The original analysis document is retained in the Sample Documentation Team.

CLEANUP TECHNICAL TEAM LEADER – During the emergency phase of the release incident, the primary goal for the operation will be to secure the source of the release, and to minimize effects of the release on the public and environment. These efforts will usually involve firefighting, plugging and patching tanks, evacuation of threatened persons, search and rescue, etc. However, it is important that while these efforts are in progress, work begins on determining appropriate cleanup methods for the affected areas. This Team will:

a. Review Strike Team/Task Force Leader Responsibilities (page 8-14);
b. Research the state-of-the-art approaches for mitigating the hazardous substance product released;
c. Determine the most reasonable and economical approach for remediation of the effects of the release;
d. Develop a removal work plan for approval by the UC;
e. Review information obtained throughout the emergency phase, and modify the removal work plan as required so it is up to date at the time of

implementation; and

f. Maintain Unit/Activity Log (ICS 214 form).

NCP SPECIAL TEAMS AND OTHER ASSETS

The phone numbers for the most commonly used NCP Special Teams and other Response Teams are included in the inside cover of this handbook. A brief description of their capabilities are provided below. These teams can be accessed by contacting your REOC or Headquarters EOC.

The EPA Radiological Emergency Response Team (RERT) responds to emergencies involving releases of radioactive materials including accidents at nuclear power plants, transportation accidents involving shipments of radioactive materials, or deliberate acts of nuclear terrorism. There are approximately 45 field-deployable members of the RERT stationed at EPA's facilities in Montgomery, AL and Las Vegas, NV. Additional support personnel are located in Washington, DC. RERT can provide advice on protective measures to ensure public health and safety; assessments of any release for dose and impact to public health and the environment; monitoring, sampling, laboratory analyses, and data assessments to assess and characterize environmental impact; and technical assistance for containment, cleanup, restoration, and recovery following a radiological incident. Assets include:

- Alpha, beta, gamma and neutron survey instruments
- Air sampling equipment
- Exposure rate and dose instruments
- Field gamma spectroscopy
- Protective equipment and personal dosimeters

- A mobile radiation laboratory
- A sample preparation laboratory
- A van equipped to scan for gamma radiation

The EPA Chemical, Biological, Radiological and Nuclear Consequence Management Advisory Team (CBRN CMAT) Provides scientific support and technical expertise for all phases of consequence management, including characterization, decontamination, clearance, and waste management of buildings, building contents, public infrastructure, agriculture, and associated environmental media. Additionally, CMAT provides specialized expertise, in areas such as biochemistry, microbiology and medicine, health physics, chemistry, HVAC engineering, and industrial hygiene. CMAT is available to assist local, national, and international agencies supporting a CBRN response and/or removal operations.

Specialized expertise and assets include:

- Airborne Spectral Photometric Environmental Collection Technology (ASPECT) which is an airborne chemical and radiological detection, infrared and photographic imagery platform.
- Portable High Throughput Integrated Laboratory Identification Systems (PHILIS) which are designed to detect chemical warfare agents and toxic industrial chemicals.
- ASPECT ASPHALT which is a ground based radiological characterization asset providing radiation detection technology for very low-level contamination.
- Biological analytical capability and capacity specific to *Bacillus anthracis*.
- Environmental Response Laboratory Network (ERLN)

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established to provide laboratory analytical capability and capacity support to chemical, biological, and radiological incidents.

The EPA Environmental Response Team (ERT) is comprised of a group of EPA technical specialists who can provide experienced technical and logistical assistance in responding to environmental emergencies such as oil or hazardous materials spills, in addition to the characterization and cleanup of hazardous waste sites. Their offices in Edison, NJ, Cincinnati, OH, Washington, DC, and Las Vegas, NV, maintain around-the-clock readiness to provide expertise in such areas including, but not limited to: rapid assessment techniques, cleanup and treatment technologies, field analytics and method development, toxicology, health and safety protocols, radiation health physics, and ecological risk assessment.

The EPA National Counterterrorism Evidence Response Team (NCERT), which is located at EPA HQ Office of Enforcement and Compliance Assurance (OECA), is comprised of Criminal Investigative Division (CID) Special Agents and staff from EPA HQ and regional offices. Team members include expert technical and investigative personnel, engineers, analysts, computer specialists, and environmental specialists, who participate in the detection of terrorist activities, evaluation of terrorist and counterterrorism activities, and investigation of and safe operations at crime scenes involving chemicals, toxic substances, and hazardous wastes.

The Environmental Response Laboratory Network (ERLN), maintained by EPA's Office of Emergency Management (OEM), provides national environmental

laboratory analytical capabilities and capacities necessary for effective and timely response to environmental contamination resulting from a natural disaster, a terrorist attack, a national threat event associated with chemical, biological, radiological, and nuclear (CBRN) releases, or other Nationally Significant Incidents. The ERLN builds upon existing networks and infrastructure and is developing testing capability and capacity to meet EPA's responsibilities for surveillance, response and recovery from incidents involving CBRN agents. OEM coordinates with other EPA programs and laboratories, and works with other Federal or state agencies to leverage resources and develop necessary laboratory capacity to meet the nation's needs for environmental analyses associated with a Nationally Significant Incident or a CBRN incident. As such, OEM should be contacted prior to contacting or obtaining laboratory services from these other providers such as the Laboratory Response Network (LRN) or the Food Emergency Response Network (FERN). The ERLN will be integrated into the HQ Environmental Unit when activated.

The USCG National Strike Force (NSF) is comprised of USCG technical specialists who deploy with specialized equipment and expertise, in addition to NIMS ICS incident management skills. They assist Federal On-Scene Coordinators and Coast Guard ICs during an incident and in their preparedness activities. The Strike Teams provide rapid response support in incident management, site safety, contractor performance monitoring, resource documentation, response strategies, hazard assessment, oil spill dispersant and operational effectiveness monitoring, high capacity lightering, and offshore skimming capabilities.

The Interagency Modeling and Atmospheric Assessment Center (IMAAC) is a Department of Homeland Security (DHS)-led interagency center that coordinates and delivers consequence predictions for major chemical, biological, or radiological airborne hazardous material releases. IMAAC rapidly generates real-time consequence prediction maps nationwide and distributes them electronically including via a controlled website. IMAAC provides a single point for the coordination and dissemination of Federal atmospheric dispersion modeling and hazard prediction products that represent the Federal position during an incident requiring Federal coordination. IMAAC also responds to major releases when state or local response assets are overwhelmed. Under the 2010 Memorandum of Understanding (MOU), the Department of Energy's (DOE) National Atmospheric Release Advisory Center (NARAC) serves as the operations hub of the IMAAC. Specialties include source term analysis, meteorology, dispersion modeling, event reconstruction, and urban dispersion.

Occupational Safety and Health Administration (OSHA) has established four specialized response teams to support the responder in the area of safety and health: the Chemical Team (toxic industrial chemicals and materials, and chemical warfare agents), the Biological Team, the Radiological Team, and the Structural Collapse Team. The teams are comprised of certified industrial hygienists, professional engineers, occupational physicians, and specialized safety experts. The OSHA teams are available to assist the OSCs in their preparedness and response duties. Requests for support should be made to OSHA's Specialized Response Team Coordinator, located at OSHA's Salt Lake Technical Center (SLTC) in Sandy, Utah

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or OSHA's Director, Directorate of Science, Technology, and Medicine located in OSHA's national office.

Department of Health & Human Services (HHS), Centers for Disease Control and Prevention (CDC), Agency for Toxic Substances and Disease Registry (ATSDR) Emergency Response Teams
The ATSDR is an agency of the United States Department of Health and Human Services (HHS). The mission of ATSDR is to serve the public by using the best science, taking responsive public health actions, and providing trusted health information to prevent harmful exposures and disease related to toxic substances. ATSDR is directed by Congressional mandate to perform specific functions concerning the effect on public health of hazardous substances in the environment. Some of these functions include public health assessments of hazardous waste sites, health consultations concerning specific hazardous substances, publication of toxicological profiles on hazardous substances, health surveillance and registries, and response to emergency releases of hazardous substances. The ATSDR has easy access to other health and medical specialists within HHS. ATSDR Emergency Response Teams are available 24/7, and are comprised of toxicologists, physicians, and other scientists available to assist during an emergency. Team members have special expertise in environmental health assessment, air monitoring, health risk communication, industrial hygiene, and bioterrorism. Most human health advice is provided by telephone to response professionals on the scene, but onsite assistance is available upon request by the OSC.

The Federal Bureau of Investigation's (FBI) Hazardous Materials Response Unit (HMRU) responds to criminal

acts and incidents involving the use of hazardous materials, and develops the FBI's technical proficiency and readiness for crime scene and evidence-related operations in cases involving chemical, biological, and radiological agents and hazardous waste materials. The HMRU staff includes a wide range of personnel including supervisory special agents, hazardous materials officers, specialists, and scientists. The HMRU interfaces with the Laboratory Response Network (LRN) for assistance with bio-agent sample analysis and data interpretation. The HMRU is based in Quantico, VA.

The FBI's Hazardous Material Response Teams (HMRTs) are teams of generally eight to thirty-two people outfitted with appropriate equipment for the collection of evidence at a potential crime scene. There are currently 28 teams located throughout the country.

Additional assets are available through the Department of Defense (DOD) and can be accessed through the National Response Center (NRC), the National Response Team (NRT), or Regional Response Teams (RRTs). These assets are discussed in detail in Chapter 19 – Biological Incidents and include the following:

- US Army's Chemical Biological Rapid Response Team (CB-RRT);
- US Army's Medical Research Institute of Infectious Diseases (USAMRIID);
- US Army's Edgewood Chemical Biological Center (ECBC);
- US Marine Corps Chemical Biological Incident Response Force (CBRIF);
- US Army Soldier Biological Chemical Command

(SBCCOM);

- US Army's Technical Escort Unit (TEU); and
- HHS CDC, National Center for Environmental Health (NCEH).

CHAPTER 15

INTELLIGENCE

The analysis and sharing of information and intelligence are important elements of the Incident Command System (ICS). Under the National Incident Management System (NIMS), intelligence includes not only national security and other types of classified information, but also other operational information, such as risk assessments that include law enforcement safety assessments, medical intelligence (e.g., surveillance), toxic contaminant levels, and other data that may come from a variety of different sources. Traditionally, the Intelligence/Investigations Function is located in the Planning Section. However, the Incident Commander (IC) may assign the Intelligence/ Investigation Function to other parts of the ICS organization. Law enforcement-sensitive information and intelligence must be appropriately analyzed and shared only with personnel designated by the IC. Those designated individuals who have proper clearance and a "need-to-know" use the information ultimately to ensure the safety of all EPA personnel and support decision making in a dynamic environment.

The Intelligence/Investigations Function may be divided into two separate functional areas or maintained as a single function, based on the mission and the IC's preference. The Intelligence/Investigations Function, for example, may be organized in any one of the following ways:

a. Within the Command Staff – This option may be most appropriate in incidents with little need for classified intelligence and in which incident-related intelligence

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is provided by supporting Agency Representatives, through real-time reach-back capabilities.

b. As a Unit within the Planning Section – This option may be most appropriate in an incident with some need for tactical intelligence and when no law enforcement entity is a member of the Unified Command (UC).

c. As a Branch within the Operations Section – This option may be most appropriate in incidents with a high need for tactical classified intelligence and when law enforcement is a member of the UC.

d. As a separate General Staff Section – This option may be most appropriate when an incident is heavily influenced by intelligence factors or when there is a need to manage and/or analyze a large volume of classified and/or highly sensitive intelligence. This option is particularly relevant to a terrorism incident, for which intelligence plays a critical role throughout the incident life cycle.

However it is organized, the Intelligence/Investigations Function is responsible for developing, conducting, and managing information-related security plans and operations, to include mission-specific, critical investigations. These can include information security and operational security activities, as well as the complex task of ensuring that sensitive information of all types (e.g., classified information, sensitive law enforcement information, proprietary and personal information, export-controlled information) is handled in a way that not only safeguards the information, but also ensures that it gets to those who need access to it so that they can effectively and safely conduct their missions. The Intelligence/

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Investigations Function also has the responsibility for coordinating information and operational-security matters with the Public Information Officer (PIO), particularly where public awareness activities may affect information or operational security.

INTELLIGENCE/INVESTIGATIONS OFFICER (IIO) – Based on the need/vision of the IC, and as previously stated, the IIO may be located within the Command or General Staff sections. The major responsibilities of the IIO are:

a. Review Common Responsibilities (page 3-1);
b. Collect and analyze incoming intelligence information from all sources;
c. Determine the applicability, significance, and reliability of incoming intelligence;
d. As requested, provide intelligence briefings to the IC/UC;
e. Coordinate with PIO and Office of External Affairs and Environmental Education (OPA as needed;
f. Provide intelligence briefings in support of the Operational Planning Cycle;
g. Provide Situation Unit with periodic updates of intelligence issues that impact consequence management operations;
h. Answer intelligence questions and advise Command and General Staff as appropriate;
i. Supervise, coordinate, and participate in the collection, analysis, processing, and dissemination of intelligence and investigative functions;
j. Assist in establishing and maintaining systematic,

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cross-referenced intelligence records and files;

k. Establish liaison with all participating law enforcement agencies including the Federal Bureau of Investigation (FBI)/Joint Terrorism Task Force (JTTF), and state, local, and tribal police departments;

l. Conduct first-order analysis on all incoming intelligence, and fuse all applicable incoming intelligence with current intelligence holdings in preparation for briefings;

m. Prepare all required intelligence reports and plans;

n. As the incident dictates, determine need to implant Intelligence Specialists in the Planning and Operations Sections; and

o. Maintain Unit/Activity Log (ICS 214 form).

CRITICAL POSITIONS TO EPA'S INTELLIGENCE COORDINATION

For access to these positions, contact the EPA Headquarters (HQ) Emergency Operations Center (EOC) at the phone number listed on the inside cover.

SENIOR INTELLIGENCE ADVISOR TO EPA OFFICE OF HOMELAND SECURITY (SIA EPA OHS) – The SIA EPA OHS is responsible for intelligence (classified) in all situations (e.g., terrorism, natural disasters) to the Administrator and his/her staff.

SENIOR INTELLIGENCE ADVISOR TO EPA OFFICE OF CRIMINAL ENFORCEMENT, FORENSICS, AND TRAINING/FIELD OPERATIONS PROGRAM (SIA EPA OCEFT/FOP) – The SIA EPA OCEFT/FOP is responsible

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for all intelligence (classified) involving all law enforcement operations for EPA, and is responsible for reporting to the HQ EOC and OCEFT senior management.

CHAPTER 16

NATURAL DISASTERS

EPA's response to a natural disaster is, at its core, a hazardous substances response. As such it should be responded to under the National Response System (NRS), using the guidance provided in Chapter 14 – Hazardous Substances Response. In the context of a response to a natural disaster, however, EPA's activities will likely be conducted under Emergency Support Function (ESF) #10–Oil and Hazardous Materials Response Annex of the National Response Framework (NRF). OSCs are encouraged to familiarize themselves with ESF #10 and the NRF as a whole.

Within the context of an ESF #10 response, there are two major types of response organizations which may be established for the response. The first type of response structure is one in which EPA's hazardous substances response is integrated into the overall incident response; this instance is essentially similar to the multiagency response structure provided in Chapter 14, and further detailed in Figure 14-3.

The other type of response structure would be one in which the activities associated with the ESF #10 mission (e.g., collection of orphan drums following a flood) are conducted as independent of other response ESF missions. In such a case, the EPA-led response to a complex incident (depicted in Figure 14-2) is most applicable, in partnership with command and operational response assets of the affected state jurisdiction.

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Natural disasters such as flooding or earthquakes are challenging to EPA's response capabilities in that they often impact large geographical areas, potentially involving large residential/commercial centers. Any organizational structure that is adopted will have to be expanded, usually within the Operations Section, to allow for both full coverage over a large area and coverage of potential Mission Assignments (MA) involving the continuing protection of citizens and the environment.

This can be seen in the accompanying organization chart (Figure 16-1) where additional Branches and/or Divisions are created to account for the geographical spread, and provide for the specific tasking of the ESF #10 mission or sub-tasking from other ESFs, such as search and rescue operations, white goods collection, and household hazardous waste pickup. In addition, it is certainly common for a natural disaster to cross jurisdictional and political boundaries, in which case the creation of separate Branches, Divisions, and/or Groups may be prudent.

Depending upon the complexity, mission scope, geography and other considerations associated with the disaster response, it may also be appropriate that an Area Command (AC) be established. In addition to the conventional role of the AC (establish priorities, broker critical resources, etc. among multiple incident command structures), an AC may also absorb non-tactical "overhead" responsibilities to support the field, such as assistance with check-in, resource ordering, timekeeping and travel support.

NCP SPECIAL TEAMS AND OTHER ASSETS

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The phone numbers for the most commonly used National Oil and Hazardous Substances Pollution Contingency Plan (NCP) Special Teams and other Response Teams are included in the inside cover of this handbook. These assets include the National Response Center (NRC), Headquarters (HQ) Emergency Operations Center (EOC), EPA Environmental Response Team (ERT), EPA Chemical, Biological, Radiological and Nuclear Consequence Management Advisory Team (CBRN CMAT), EPA Radiological Emergency Response Team (RERT), United States Coast Guard (USCG) National Strike Force Coordination Center (NSFCC), and the USCG Atlantic, Gulf, and Pacific Strike Teams.

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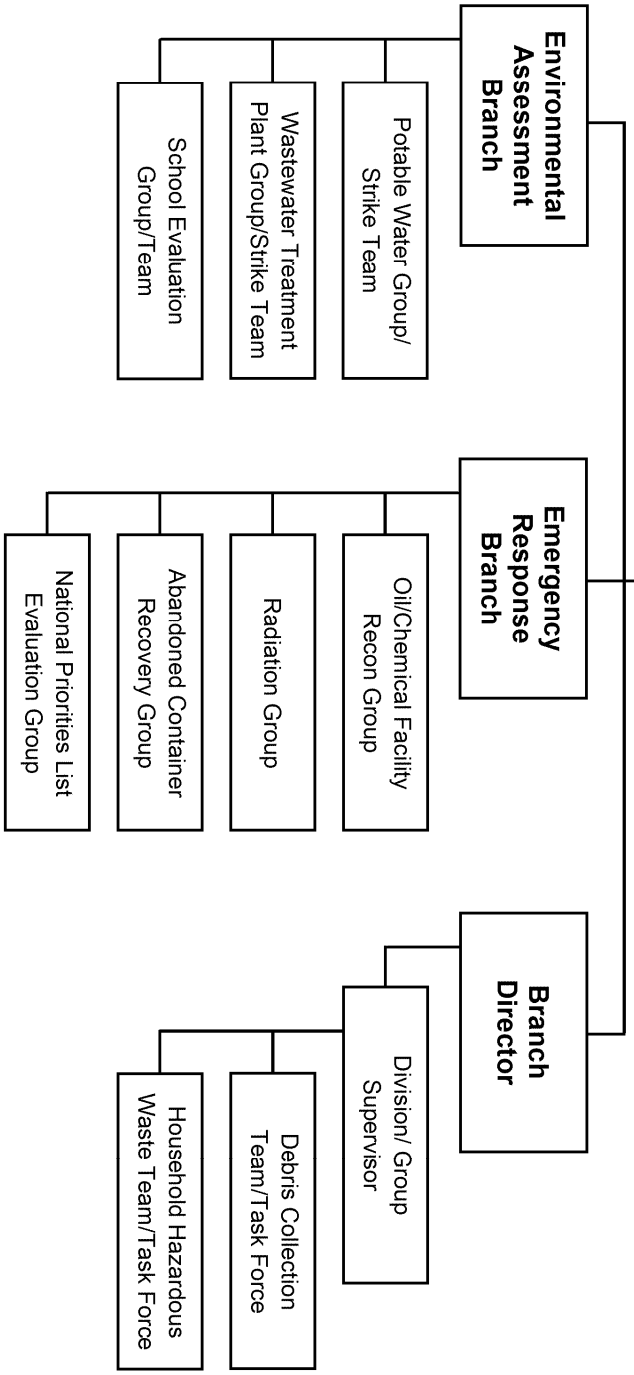
FIGURE 16-1: NATURAL DISASTER RESPONSE



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NATURAL DISASTER SPECIFIC INCIDENT COMMAND SYSTEM (ICS) POSITIONS AND TASK DESCRIPTIONS

Only those positions and tasks specific and unique to Natural Disaster response missions will be described in this section. Persons assigned to positions common and consistent with the National Incident Management System (NIMS) organization should refer to Chapters 7 through 11 of this Incident Management Handbook (IMH) for their position/task description checklists.

POTABLE WATER GROUP/STRIKE TEAM – This Group/Team, led by a Group Supervisor or Team Leader typically reports to the Environmental Assessment Branch. The Group/Team is responsible for accomplishing Agency regulatory and statutory responsibilities for the water sector (public water system and wastewater system infrastructures) under the Safe Drinking Water Act and Clean Water Act. Depending on the specific organizational layout and the timing of the response, this Group/Team may also be responsible for providing assistance to local and state entities in bringing potable water systems back online. Additional tasks include:

a. Review Division/Group Supervisor Responsibilities (page 8-12) or Strike Team/Task Force Leader Responsibilities (page 8-14);
b. Maintain communications and coordinate operations with any technical specialists supporting Branch operations as specified within the Incident Action Plan (IAP);
c. Maintain communications and coordinate activities with the appropriate local and state officials

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regarding priority systems, access issues, identity of key personnel, etc.; and

d. Maintain Unit/Activity Log (ICS 214 form).

WASTEWATER TREATMENT PLANT (WWTP) GROUP/STRIKE TEAM – This Group/Team, led by a Group Supervisor or Team Leader typically reports to the Environmental Assessment Branch. The Group/Team is responsible for obtaining the status of wastewater treatment systems and may also be responsible for providing assistance to local and state entities in bringing wastewater treatment systems back online. Additional tasks are similar to those described above for the Potable Water Group/Team.

SCHOOL EVALUATION GROUP/TEAM – This Group/Team is responsible for the assessment of schools for the presence and condition of hazardous materials. This may include inspections of laboratories, classrooms, and storage areas. Additional tasks include:

a. Review Division/Group Supervisor Responsibilities (page 8-12) or Strike Team/Task Force Leader Responsibilities (page 8-14);
b. Develop plans for the assessments;
c. Communicate and coordinate activities with local and state entities for general assistance, identification of key personnel, priority sites, access issues, etc.;
d. Communicate and coordinate activities with the site safety officer;
e. Communicate and provide the proper

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documentation to the Group/Team/Task Force identified in the IAP that will be coordinating removal activities of hazardous materials identified by the School Evaluation Group/Team; and

f. Maintain Unit/Activity Log (ICS 214 form).

OIL/CHEMICAL FACILITY RECON GROUP, RADIATION GROUP, ABANDONED CONTAINER RECOVERY GROUP, NATIONAL PRIORITIES LIST (NPL) EVALUATION GROUP – These specific Groups, led by Group Supervisors, typically report to the Emergency Response Branch within the Operations Section. While these Groups are initially tasked with reconnaissance, their recon can potentially lead to emergency response activities and as such, members of these teams must have the prerequisite training and possess the appropriate personal protective equipment (PPE) and monitoring equipment. Activities may include:

a. Review Division/Group Supervisor Responsibilities (page 8-12);

b. Develop plans for reconnaissance;

c. Communicate and coordinate activities with the site safety officer, local and state entities for general assistance, identification of key personnel, priority sites, access issues, etc.;

d. Maintain communications and coordination of operations with any technical specialists supporting Branch operations as specified within the IAP;

e. Ensure that all samples are obtained following appropriate sample protocol and that all samples taken are properly documented and follow chain-of-

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custody procedures;

f. Communicate and coordinate regarding the removal of hazardous constituents, if applicable, with appropriate personnel, (e.g., contractors, technical specialists, site safety officer, hazardous waste collection/Staging Area personnel);

g. Provide full documentation of addresses where reconnaissance work has been conducted, approximate quantities and descriptions of hazardous waste removed, and any interaction with private property/homeowners or state/local officials; and

h. Maintain Unit/Activity Log (ICS 214 form).

DEBRIS COLLECTION TEAM/TASK FORCE – This Team/Task Force, led by a Team Leader or Task Force Leader, typically reports to a Division or Group Supervisor within a Branch of the Operations Section. The Team/Task Force is responsible for retrieving hazardous debris, drums, cylinders, totes, and larger containers from impacted areas. They may also be tasked with air or product monitoring/sampling prior to movement and offloading the product into transportable containers. The Team/Task Force per the specific IAP may also be responsible for transporting the containers to a pre-determined Staging Area. Additional activities may include:

a. Review Strike Team/Task Force Leader Responsibilities (page 8-14);

b. Assist in developing plans for the collection and transportation of hazardous debris;

c. Communicate and coordinate activities with the

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site safety officer, air monitoring teams, local entities and/or Agency legal staff regarding access issues, hazardous waste collection/Staging Areas, and other similarly tasked collection teams;

d. Document fully the debris inspected, handled, sampled, and transported; and

e. Maintain Unit/Activity Log (ICS 214 form).

HOUSEHOLD HAZARDOUS WASTE TEAM/TASK FORCE – This Team/Task Force, led by a Team Leader or Task Force Leader, typically reports to a Division or Group Supervisor within a Branch of the Operations Section. The Team/Task Force is responsible for retrieving hazardous substances normally found in small containers in a home or small business setting. Examples of household hazardous waste (HHW) include: bleach, car batteries, barbeque-sized propane cylinders, pesticides/herbicides, some paints, degreasers, and solvents. This Team/Task Force may also be responsible for transporting these items to a pre-determined Staging Area. Since entering homes after they have been impacted by a natural disaster may have serious safety implications due to the lack of structural integrity, much of the retrieval of HHW may be conducted from the curbside after items have been moved there by homeowners or contractors. Additional activities may include:

a. Review Strike Team/Task Force Leader Responsibilities (page 8-14);

b. Assist in developing plans for the collection and transportation of HHW;

c. Communicate and coordinate activities with the site safety officer, local entities and/or Agency legal

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staff regarding access issues, hazardous waste collection/Staging Areas, and other similarly tasked collection teams;

d. Provide full documentation of addresses where work has been conducted, approximate quantities and descriptions of HHW removed, and any interaction with private property/ homeowners; and

e. Maintain Unit/Activity Log (ICS 214 form).

CHAPTER 17

INLAND OIL SPILLS

The Inland Oil Spills Chapter of the EPA Incident Management Handbook (IMH) is intended to be consistent with the United States Coast Guard's (USCG) IMH. This chapter has been developed from the perspective of EPA responding to an oil spill occurring in the inland zone and/or in EPA's response jurisdiction.

This chapter is designed to provide the organizational structure that will provide supervision and control for the essential functions required at inland oil spill incidents. The organizational structure will have much in common with the structure used for managing a hazardous substances response. As applicable, consult Chapter 14 – Hazardous Substances Response, regarding relevant aspects of those organizational structures. Only the organization and task descriptions that are pertinent to oil spill Incident Command System (ICS) positions, functions, and tasks are presented in this chapter. For a full description of a specific ICS position assignment or task, refer to the appropriate task assignment provided in Chapters 7 through 11 of this IMH.

The typical incident objectives for an oil spill response are:

- Ensure the safety of citizens and response personnel;
- Control the source of the spill;
- Manage a coordinated response effort;
- Maximize protection of environmentally sensitive areas including wildlife and historic properties;
- Contain and recover spilled material;

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- Recover and rehabilitate injured wildlife;
- Remove oil from impacted areas;
- Minimize economic impacts;
- Keep stakeholders informed of response activities; and
- Keep the public informed of response activities.

Two scenarios are presented in this chapter, presenting unique concerns for incident management. The first scenario, with an ICS organization chart depicted in Figure 17-1, involves an EPA-led response to an inland oil spill that impacts areas in close proximity (for example, a release from a facility that impacts a localized area along a single shore of a navigable waterway). The second, with an ICS organization chart depicted in Figure 17-2, involves an EPA-led response to an inland oil spill that involves locations which are geographically separate (for example, a pipeline break or vessel rupture in which oil impacts both shores of a wide river, with no bridge located nearby). It should be noted that there is no one “correct” approach to managing either type of incident; in the latter case especially, a number of approaches are available for dealing with what could be a major incident including dividing the incident into two or more incidents, expanding the ICS planning capacity for the incident, or expanding the ICS organization to accommodate a second Operations or Logistics Section. For the purposes of this IMH, however, the organizational structure presented depicts a fairly straightforward response in which the Operations Section is divided and the Staging Areas are developed along the lines of the geographic division of the river.

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FIGURE 17-1: NON-GEOGRAPHICALLY DIVIDED (LOCALIZED)

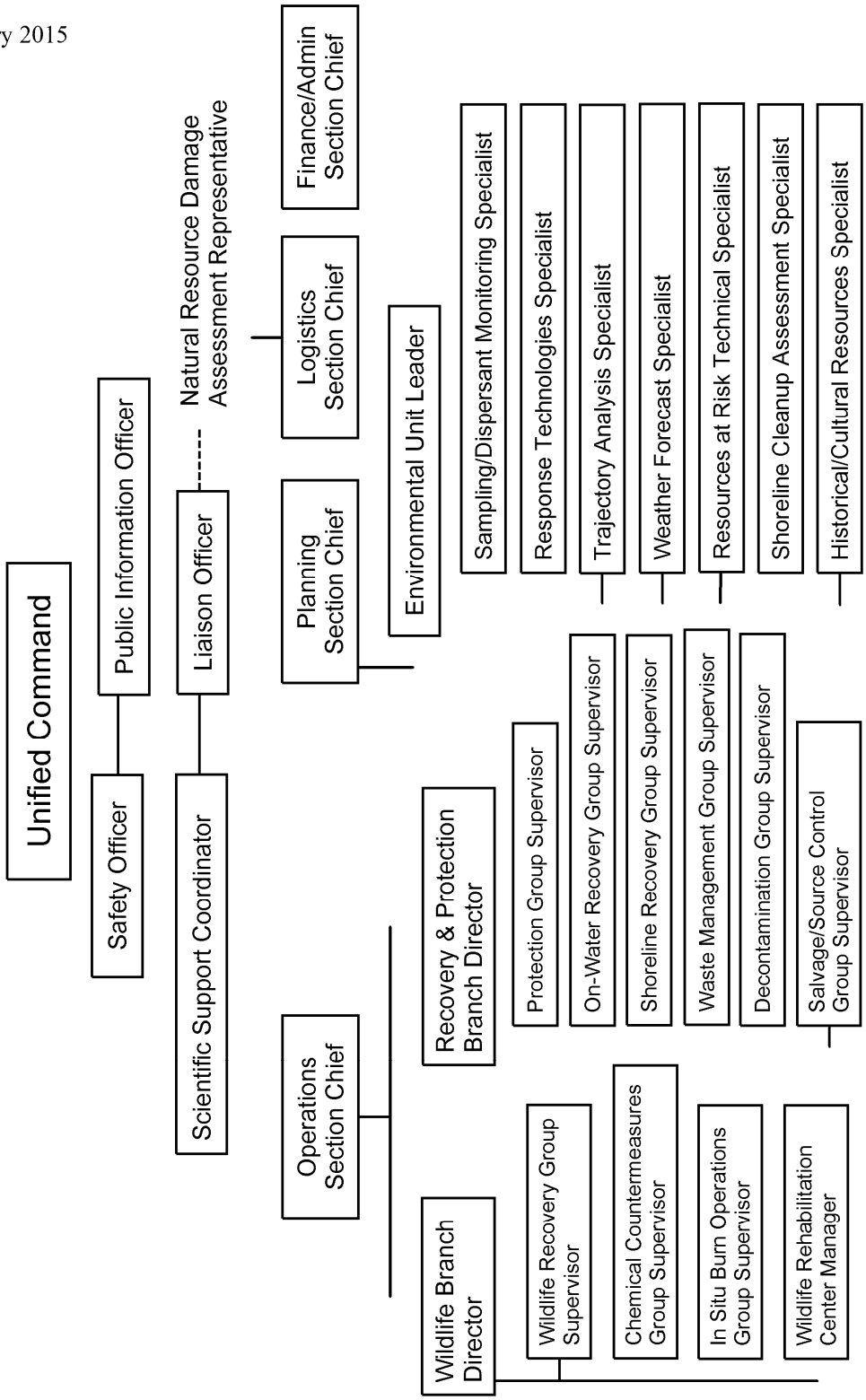
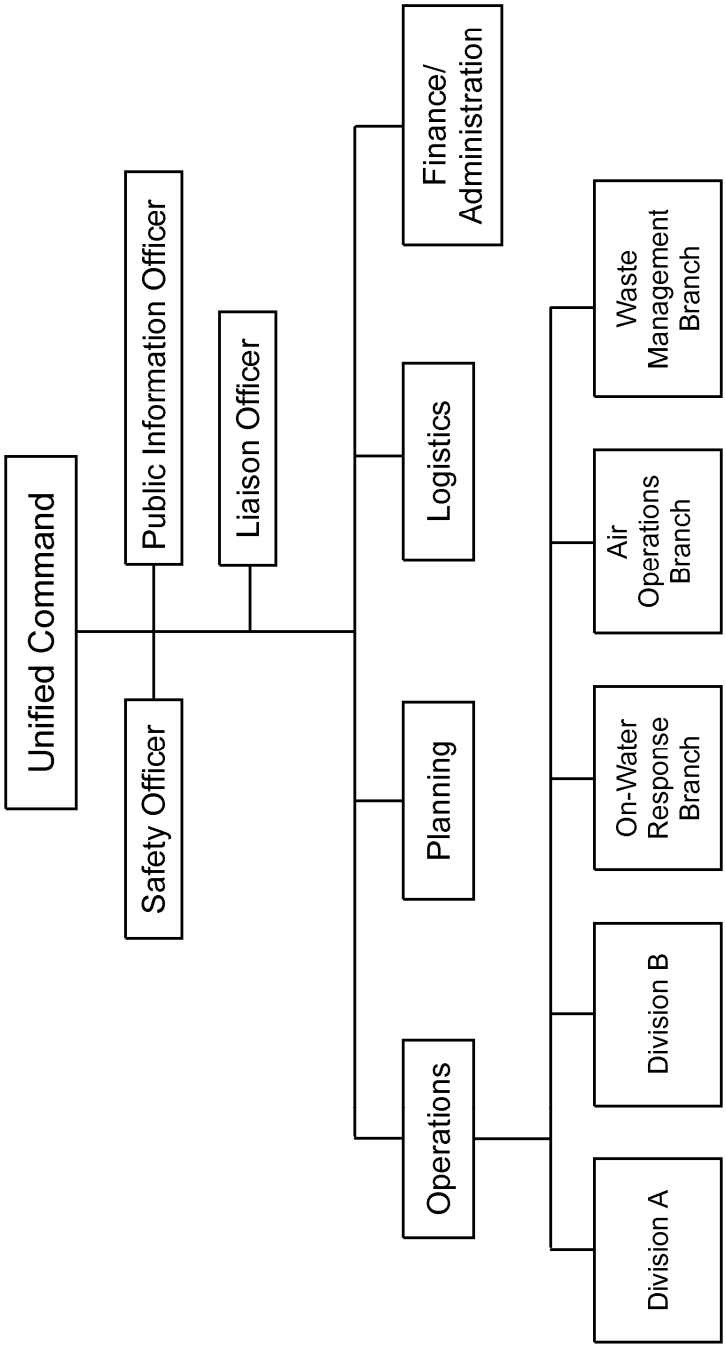


FIGURE 17-2: GEOGRAPHICALLY DISPERSED INLAND OIL SPILL



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UNIFIED COMMAND (UC) – Whenever possible and practical, an oil spill response should be organized under a UC structure that includes, but is not limited to:

- The lead On-Scene Coordinator (OSC)
- The state/tribal On-Scene Incident Commander (IC)
- The representative of the Responsible Party (RP) IC
- Appropriate local authorities

The UC is responsible for the overall management of the incident; however, regulatory authority cannot be delegated or shared with other agencies. The UC oversees the incident activities, including the development and implementation of strategic decisions, and approves the ordering and releasing of resources. The UC may assign a Deputy IC to assist in carrying out IC responsibilities. Tasks specific to oil spill events are:

a. Review IC Responsibilities (page 7-2);
b. Review incident objectives found on page 17-1;
c. Be cognizant of oil spill response activities;
d. Ensure control of the source of the spill;
e. Manage a coordinated response effort;
f. Maximize protection of environmentally sensitive areas;
g. Ensure containment and recovery of spilled material;
h. Ensure recovery and rehabilitation of injured wildlife;
i. Ensure removal of oil from impacted areas;
j. Ensure minimal economic impacts;

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k. Keep stakeholders informed of response activities;
l. Keep the public informed of response activities;
m. Ensure that the source of a discharge is designated and that the RP advertises procedures by which claims may be presented or that the National Pollution Funds Center (NPFC) assumes this role;
n. Inform the NPFC regarding the source of the discharge. NPFC will issue the required Notice of Designation;
o. Refer all removal and damage claims to the RP or, if no identifiable RP, to the NPFC Claims Adjudication Division; and
p. Maintain Unit/Activity Log (ICS 214 form).

SCIENTIFIC SUPPORT COORDINATOR (SSC) – The SSC is a technical specialist and is defined in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) as the principal advisor to the OSC for scientific issues. The SSC is responsible for providing expertise on chemical hazards, field observations, trajectory analysis, resources at risk, environmental tradeoffs of countermeasures and cleanup methods, and information management. The SSC is also charged with gaining consensus on scientific issues affecting the response, and ensuring that differing opinions within the scientific community are communicated to the incident command. Additionally, the SSC is responsible for providing data on weather, tides, currents, and other applicable environmental conditions. The SSC may serve as the Environmental Unit Leader (ENVL). Tasks specific to the SSC include:

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a. Review SSC Responsibilities (page 7-13);
b. Attend Planning Meetings;
c. Determine resource needs;
d. Obtain consensus on scientific issues affecting the response and present differing opinions to the IC;
e. Provide information on chemical hazards;
f. Evaluate environmental tradeoffs of countermeasures and cleanup methods, and response endpoints; and
g. Maintain Unit/Activity Log (ICS 214 form).

NATURAL RESOURCE DAMAGE ASSESSMENT (NRDA) REPRESENTATIVE – The NRDA Representatives are responsible for coordinating NRDA needs and activities of the trustee team. NRDA activities generally do not occur within the structure, processes, and control of the ICS. However, particularly in the early phases of a spill response, many NRDA activities overlap with the environmental assessment performed for spill response. Therefore, NRDA Representatives should remain coordinated with the spill response organization through the Liaison Officer (LNO), and they may need to work directly with the UC, Planning Section, Operations Section, and the SSC to resolve any problems or address areas of overlap. This includes close coordination with the LNO for obtaining timely information on the spill and injuries to natural resources.

While NRDA resource requirements and costs may fall outside the responsibility of the Logistics and Finance/Administration Sections, coordination is important.

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The NRDA Representative will coordinate NRDA or injury determination activities. Tasks specific to the NRDA Representative include:

a. Review Agency Representative Responsibilities (page 7-8);
b. Attend appropriate meetings to facilitate communication of NRDA issues to the IC;
c. Provide status reports;
d. Coordinate with the Operations Section Chief (OPS) to assure that NRDA field activities do not conflict with response activities;
e. Coordinate with Logistics Section Chief (LSC) to request logistical support for NRDA field activities;
f. Working in the Environmental Unit, coordinate with OPS in acquiring response-related samples or results of sample analysis applicable to NRDA (e.g., spilled petroleum product from source, oil from contaminated wildlife);
g. Obtain necessary safety briefings for access to sampling sites;
h. Coordinate with other organizations and identify personnel available for NRDA; and
i. Maintain Unit/Activity Log (ICS 214 form).

The following positions, if established, would normally be assigned to the Operations Section.

WILDLIFE BRANCH DIRECTOR – The Wildlife Branch Director is responsible for: minimizing wildlife injuries during spill responses; coordinating early aerial and ground

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reconnaissance of the wildlife at the spill site and reporting results to the Situation Unit Leader (SITL); advising on wildlife protection strategies, including diversionary booming placements, in situ burning, and chemical countermeasures; removing oiled carcasses, employing wildlife hazing measures as authorized in the Incident Action Plan (IAP); and recovering and rehabilitating impacted wildlife. A central Wildlife Processing Center should be identified and maintained for evidence tagging, transportation, veterinary services, treatment and rehabilitation storage, and other support needs. The activities of private wildlife care groups, including those employed by the RP, will be overseen and coordinated by the Wildlife Branch Director. Tasks specific to the Wildlife Branch Director include:

a. Review Branch Director Responsibilities (page 8-11);
b. Develop the Wildlife Branch portion of the IAP;
c. Supervise Wildlife Branch operations;
d. Determine resource needs;
e. Review the suggested list of resources to be released and initiate recommendation for release of resources;
f. Assemble and disassemble Teams/Task Forces assigned to the Wildlife Branch;
g. Report information about special activities, events, and occurrences to the OPS;
h. Assist in determining training needs of wildlife recovery volunteers; and
i. Maintain Unit/Activity Log (ICS 214 form).

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WILDLIFE RECOVERY GROUP SUPERVISOR – The Wildlife Recovery Group Supervisor is responsible for coordinating the search for, collection of, and field tagging of dead and live impacted wildlife, and transporting them to the processing center(s). This Group should coordinate with the Planning Section's Situation Unit in conducting aerial and group surveys of wildlife populations in the vicinity of the spill. They should also deploy acoustic and visual wildlife hazing equipment, as needed. Tasks specific to the Wildlife Recovery Group Supervisor include:

a. Review Division/Group Supervisor Responsibilities (page 8-12);
b. Determine resource needs;
c. Establish and implement protocols for collection and logging of impacted wildlife;
d. Coordinate with the LSC on the transportation of wildlife to processing stations(s); and
e. Maintain Unit/Activity Log (ICS 214 form).

CHEMICAL COUNTERMEASURES GROUP SUPERVISOR – The Chemical Countermeasures Group Supervisor is responsible for coordinating all aspects of a chemical countermeasure application operation, once approval for their use has been obtained through the network established in Subpart J of the NCP. For aerial applications, the Group works closely with the Air Tactical Group Supervisor. Tasks specific to the Chemical Countermeasures Group Supervisor include:

a. Review Division/Group Supervisor responsibilities (page 8-12);
b. Ensure consistency with the 2013 National

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Response Team (NRT) Environmental Monitoring for Atypical Dispersant Application Guidance and Special Monitoring of Applied Response Technologies (SMART) protocol (or an updated version if available) for sampling;

c. Determine resource needs;
d. Assist the Planning Section and Environmental Unit in the development of dispersant operations and environmental monitoring plans;
e. Implement approved dispersant operations and monitoring plans;
f. Manage dedicated dispersant resources and coordinate required monitoring; and
g. Maintain Unit/Activity Log (ICS 214 form).

IN SITU BURN OPERATIONS GROUP SUPERVISOR – The In Situ Burn Operations Group Supervisor is responsible for coordinating all aspects of an in situ burning (ISB) operation, once approval for their use has been obtained through the network established in Subpart J of the NCP. For aerial ignition, the Group works closely with the Air Tactical Group Supervisor. Tasks specific to the In Situ Burn Operations Group Supervisor include:

a. Review Division/Group Supervisor Responsibilities (page 8-12);
b. Determine resource needs;
c. Assist the Planning Section in the development of ISB operations and monitoring plans;
d. Implement approved in ISB operations and monitoring plans;

e. Manage dedicated ISB resources;
f. Coordinate required monitoring; and
g. Maintain Unit/Activity Log (ICS 214 form).

WILDLIFE REHABILITATION CENTER MANAGER – The Wildlife Rehabilitation Center Manager is responsible for the oversight of facility operations, including: receiving oiled wildlife at the processing center, recording essential information, collecting necessary samples, and conducting triage, stabilization, treatment, transport, and rehabilitation of oiled wildlife. The Wildlife Rehabilitation Center Manager is responsible for assuring transportation to appropriate treatment centers for oiled animals requiring extended care and treatment. Tasks specific to the Wildlife Rehabilitation Center Manager include:

a. Review Common Responsibilities (page 3-1);
b. Determine resource needs and establish a processing station for impacted wildlife;
c. Advise the Wildlife Branch Director on the feasibility of surface washing agents;
d. Process impacted wildlife and maintain logs;
e. Collect numbers/types/status of impacted wildlife and brief the Wildlife Branch Operations Director;
f. Coordinate with the LSC on the transportation of wildlife to other facilities;
g. Coordinate release of recovered wildlife with the Natural Resource trustee;
h. Implement Incident Demobilization Plan; and
i. Maintain Unit/Activity Log (ICS 214 form).

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RECOVERY AND PROTECTION BRANCH DIRECTOR – The Recovery and Protection Branch Director is responsible for overseeing and implementing the protection, containment, and cleanup activities established in the IAP. Tasks specific to the Recovery and Protection Branch Director include:

a. Review Branch Director Responsibilities (page 8-11);
b. Obtain and review Area Contingency Plans (ACPs) if developed;
c. Advise OPS on feasible recovery methods, Staging Areas, and access areas;
d. Advise OPS on equipment usage and availability for proposed recovery actions;
e. In conjunction with Natural Resources Trustee Representative and the Historical/Cultural Resources Specialist, develop a prioritized list of sensitive areas or species that may be impacted by recovery actions;
f. Develop a protection strategy for resources at risk;
g. Coordinate with the SSC; and
h. Maintain Unit/Activity Log (ICS 214 form).

PROTECTION GROUP SUPERVISOR – The Protection Group Supervisor is responsible for the deployment of containment, diversion, and adsorbent/absorbent materials in designated locations. Depending on the size of the incident, the Protection Group may be further divided into Teams, Task Forces, and Single Resources. Tasks specific to the Protection Group Supervisor include:

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a. Review Division/Group Supervisor Responsibilities (page 8-12);
b. Implement Protection Strategies in the IAP;
c. Direct, coordinate, and assess the effectiveness of protective actions;
d. Modify protective actions, as needed; and
e. Maintain Unit/Activity Log (ICS 214 form).

ON-WATER RECOVERY GROUP SUPERVISOR – The On-Water Recovery Group Supervisor is responsible for managing on-water recovery operations in compliance with the IAP. The Group may be further divided into Teams, Task Forces, and Single Resources. Tasks specific to the On-Water Recovery Group Supervisor include:

a. Review Division/Group Supervisor Responsibilities (page 8-12);
b. Implement Recovery Strategies in the IAP;
c. Direct, coordinate, and assess the effectiveness of on-water recovery actions;
d. Modify recovery actions as needed;
e. Coordinate with Shoreline Recovery Group Supervisor; and
f. Maintain Unit/Activity Log (ICS 214 form).

SHORELINE RECOVERY GROUP SUPERVISOR – The Shoreline Recovery Group Supervisor is responsible for managing shoreline cleanup operations in compliance with the IAP. The Group may be further divided into Strike Teams, Task Forces, and Single Resources. Tasks specific to the Shoreline Recovery Group Supervisor include:

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a. Review Division/Group Supervisor Responsibilities (page 8-12);
b. Implement Recovery Strategies in the IAP;
c. Direct, coordinate, and assess effectiveness of shoreline recovery actions;
d. Modify protective actions, as needed;
e. Coordinate with the On-Water Recovery Group Supervisor; and
f. Maintain Unit/Activity Log (ICS 214 form).

WASTE MANAGEMENT GROUP SUPERVISOR – The Waste Management Group Supervisor is responsible for coordinating the onsite activities of personnel engaged in collecting, storing, transporting, and disposing of waste materials. Depending on the size and location of the spill, the Waste Management Group may be further divided into Teams, Task Forces, and Single Resources. Tasks specific to the Waste Management Group Supervisor include:

a. Review Division/Group Supervisor Responsibilities (page 8-12);
b. Implement the Waste Management portion of the IAP;
c. Ensure compliance with all hazardous waste laws and regulations;
d. Maintain accurate records of recovered material; and
e. Maintain Unit/Activity Log (ICS 214 form).

DECONTAMINATION GROUP SUPERVISOR – The Decontamination Group Supervisor is responsible for

decontamination of personnel and response equipment in compliance with approved statutes. Tasks specific to the Decontamination Group Supervisor include:

a. Review Division/Group Supervisor Responsibilities (page 8-12);
b. Develop and implement Decontamination Plan;
c. Determine resource needs;
d. Direct and coordinate decontamination activities;
e. Brief site safety officer on conditions; and
f. Maintain Unit/Activity Log (ICS 214 form).

SALVAGE/SOURCE CONTROL GROUP SUPERVISOR – Under the direction of the Recovery and Protection Branch Director, the Salvage/Source Control Group Supervisor is responsible for coordinating and directing all salvage/source control activities related to the incident. Tasks specific to the Salvage/Source Control Group Supervisor include:

a. Review Division/Group Supervisor Responsibilities (page 8-12);
b. Coordinate the development of Salvage/Source Control Plan;
c. Determine Salvage/Source Control resource needs;
d. Direct and coordinate implementation of the Salvage/Source Control Plan;
e. Manage dedicated Salvage/Source Control resources; and
f. Maintain Unit/Activity Log (ICS 214 form).

The following positions may be organized under the Environmental Unit.

SAMPLING/DISPERSANT MONITORING SPECIALIST – The Sampling/Dispersant Monitoring Specialist is responsible for providing a sampling plan for the coordinated collection, documentation, storage, transportation, and submittal to appropriate laboratories for analysis or storage. Tasks specific to the Sampling/ Dispersant Monitoring Specialist include:

a. Review Common Responsibilities (page 3-1);
b. Determine resource needs;
c. Participate in Planning Meetings as required;
d. Identify and alert appropriate laboratories;
e. Meet with Team to develop an initial sampling plan and strategy, and review sampling and labeling procedures;
f. Ensure consistency with SMART protocols;
g. Set up site map to monitor the location of samples collected and coordinate with geographic information systems (GIS) staff;
h. Coordinate sampling activities with the NRDA Representative, Investigation Team, and legal advisors;
i. Provide status reports to appropriate requesters; and
j. Maintain Unit/Activity Log (ICS 214 form).

RESPONSE TECHNOLOGIES SPECIALIST – The Response Technologies Specialist is responsible for

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evaluating the opportunities to use various response technologies, including mechanical containment and recovery, dispersant or other chemical countermeasures, ISB, and bioremediation. The Specialist will conduct the consultation and planning required by deploying a specific response technology, and by articulating the environmental tradeoffs of using or not using a specific response technique. Tasks specific to the Response Technologies Specialist include:

a. Review Common Responsibilities (page 3-1);
b. Participate in Planning Meetings, as required;
c. Determine resource needs;
d. Gather data pertaining to the spill, including spill location, type and amount of petroleum spilled, physical and chemical properties, weather and inland water conditions, and resources at risk;
e. Identify the available response technologies that may be effective on the specific spilled petroleum;
f. Make initial notification to all agencies that have authority over the use of response technologies;
g. Keep the Planning Section Chief (PSC) advised of response technologies issues;
h. Provide status reports to appropriate requesters;
i. Establish communications with the Regional Response Team (RRT) to coordinate response technologies activities; and
j. Maintain Unit/Activity Log (ICS 214 form).

TRAJECTORY ANALYSIS SPECIALIST – The Trajectory Analysis Specialist is responsible for providing projections

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and estimates of the movement and behavior of the spill to the UC. The Specialist will combine visual observations, remote sensing information, and computer modeling, as well as observed and predicted tidal, current, flow, and weather data to form these analyses.

Additionally, the Specialist is responsible for interfacing with local experts (e.g., weather service, academia, researchers) in formulating these analyses. Trajectory maps, overflight maps, tides and current data, and weather forecasts will be supplied by the Specialist to the Situation Unit for dissemination throughout the Incident Command Post (ICP). Tasks specific to the Trajectory Analysis Specialist include:

a. Review Common Responsibilities (page 3-1);
b. Schedule and conduct spill observations/overflights, as needed;
c. Gather pertinent information on tides, flow, currents, and weather from all available sources;
d. Provide a trajectory and overflight maps, weather forecasts, and tidal and current information to SITL and OPS;
e. Provide briefing on observations and analyses to the OPS and the appropriate personnel; and
f. Maintain Unit/Activity Log (ICS 214 form).

WEATHER FORECAST SPECIALIST – The Weather Forecast Specialist is responsible for acquiring and reporting incident-specific weather forecasts. The Specialist will interpret and analyze data from the National Oceanic and Atmospheric Administration's (NOAA)

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National Weather Service and other sources. This person will be available to answer specific weather-related questions and coordinate with the SSC and Trajectory Analysis Specialist in coordination with the Operations Section. The specialist will provide weather forecasts to the Situation Unit for dissemination throughout the ICP. Tasks specific to the Weather Forecast Specialist include:

a. Review Common Responsibilities (page 3-1);
b. Gather pertinent weather information from all appropriate sources;
c. Provide incident-specific weather forecasts on an assigned schedule;
d. Provide briefings on weather observations and forecasts to the proper personnel; and
e. Maintain Unit/Activity Log (ICS 214 form).

RESOURCES AT RISK TECHNICAL SPECIALIST

The Resources at Risk Technical Specialist is responsible for the identification of resources thought to be at risk from exposure to the spilled oil through the analysis of known and anticipated oil movement, and the location of natural, economic resources, and historic properties. The Resources at Risk Technical Specialist considers the relative importance of the resources and the relative risk to develop a priority list for protection. Tasks specific to the Resources at Risk Technical Specialist include:

a. Review Common Responsibilities (page 3-1);
b. Participate in Planning Meetings as required;
c. Determine resource needs;
d. Obtain current and forecasted status information from the Situation Unit;

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e. Identify natural resources at risk, including threatened and endangered species, and their critical habitat following consultation with Natural Resource Trustee Representatives;

f. Identify historic properties at risk following consultation with the Historical/Cultural Resources Specialist;

g. Identify socioeconomic resources at risk;

h. Develop a prioritized list of the resources at risk for use by the Planning Section in consultation with Natural Resource Trustee Representatives, Land Management Agency Representatives, and the Historical/Cultural Resources Specialist;

i. Provide status reports to appropriate requesters; and

j. Maintain Unit/Activity Log (ICS 214 form).

SHORELINE CLEANUP ASSESSMENT SPECIALIST – The Shoreline Cleanup Assessment Specialist is responsible for providing appropriate cleanup recommendations for the impacted shoreline. This Specialist will recommend the need for, and the numbers of, Shoreline Cleanup Assessment Teams (SCATs) and will be responsible for making cleanup recommendations to the ENVL. Tasks specific to the Shoreline Cleanup Assessment Specialist include:

a. Review Common Responsibilities (page 3-1);

b. Obtain a briefing and special instructions from the ENVL;

c. Participate in Planning Section meetings;

d. Recommend the need for and number of SCATs;

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e. Describe shoreline types and oiling conditions;
f. Identify sensitive resources (e.g., ecological, recreational, historical properties, economic);
g. Recommend the need for cleanup in consultation with Natural Resource Trustee Representatives, Land Management Agency Representatives, and the OSC's Historical/Cultural Resources Specialist;
h. Recommend cleanup priorities in consultation with Natural Resource Trustee Representatives, Land Management Agency Representatives, and the OSC's Historical/Cultural Resources Specialist;
i. Monitor cleanup effectiveness;
j. Recommend shoreline cleanup methods and endpoints; and
k. Maintain Unit/Activity Log (ICS 214 form).

HISTORICAL/CULTURAL RESOURCES SPECIALIST (HCRS) – The HCRS is responsible for identifying and resolving issues related to any historical or cultural sites that are threatened or impacted during an incident. The Specialist must understand and be able to implement a "Programmatic Agreement on Protection of Historic Properties" (Consult NRT's document "Programmatic Agreement on the Protection of Historic Properties During Emergency Response under the NCP" for guidance) as well as consulting with State Historic Preservation Offices (SHPO), land management agencies, appropriate native tribes and organizations, and other concerned parties. The Specialist must identify historical/cultural sites and develop strategies for protection and cleanup of those sites in order to minimize damage. Tasks specific to the HCRS include:

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a. Review Agency Representative Responsibilities (page 7-8);
b. Implement the Programmatic Agreement (PA) for the IC; If a PA is not used, coordinate National Historic Preservation Act (NHPA) Section 106 consultations with the SHPO;
c. Consult and reach consensus with the concerned parties on affected historical/cultural sites;
d. Identify and prioritize threatened or impacted historical/cultural sites;
e. Develop response strategies to protect historical/cultural sites;
f. Participate in the testing and evaluation of cleanup techniques used on historical/cultural sites;
g. Ensure compliance with applicable Federal/state/tribal regulations; and
h. Maintain Unit/Activity Log (ICS 214 form).

FINANCE/ADMINISTRATION SECTION CHIEF (FSC) – Refer to page 11-2 for the FSC position responsibilities. In addition, consult the NPFC's User Reference Guide (Technical Operating Procedures (TOPS)) and the Finance and Resource Management Field Guide (FFARM) for guidance on oil spill financial issues. Both of these guides can be accessed at www.uscg.mil/hq/npfc/response/index.htm. Ensure that EPA cost accounting directives are fulfilled, including entry of contractor data into Removal Cost Management System (RCMS).

For inland oil spills where the EPA Emergency and Rapid

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Response Services (ERRS) contractor either cannot provide the required support in a timely manner or it is not cost efficient to do so, the Incident Management Team (IMT) should consider utilizing the USCG Basic Ordering Agreements (BOA) to obtain contractor support to assist in cleanup efforts. A Federal Project Number (FPN) and funding ceiling must be established, and the IMT must work through the USCG-designated EPA Contracting Officer to obtain an Authorization to Proceed with Disposal of Oil or Hazardous Material Spill (ATP) to be issued to the selected BOA vendor.

CHAPTER 18

RADIOLOGICAL/NUCLEAR INCIDENTS

INTRODUCTION

A radiological or nuclear incident is inherently a hazardous substance incident. As such it should be responded to under the National Response System (NRS). This chapter discusses only those organizational and task descriptions pertinent to radiological/nuclear incident functions, tasks, and positions within an Incident Command System (ICS) structure. As applicable, consult Chapter 14 – Hazardous Substances Response and Chapter 20 – Chemical Agent Incidents of this Incident Management Handbook (IMH) regarding the establishment and use of ICS in hazardous substances incidents and chemical agent incidents.

EPA response personnel should review the National Response Framework (NRF) Nuclear/Radiological Incident Annex (NRIA) and the latest version of the EPA Radiological Emergency Response Plan for further details regarding these issues. In addition, EPA's On-Scene Coordinator (OSC) Radiological Response Guidelines provides additional information about responding to radiological emergencies. Responders should also refer to the "PAG Manual: Protective Action Guides and Planning Guidance for Radiological Incidents" (2013) which can be found at http://www.epa.gov/radiation/rert/pags.html#pags Operational information can be found in the 2015 Interim Draft EPA "National Tactical Radioactive Response Guide" developed by the Chemical, Biological, Radiological and Nuclear Consequence Management Advisory Team

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(CBRN CMAT).

Exposure rates and total dose limits can be found in the EPA Memorandum, dated December 07, 2006, on Turnback Guidance for EPA Personnel Responding to Radiological Emergencies

In addition to the objectives established in Chapter 2 of this IMH, a radiological incident response typically includes the following incident objectives:

- Provide Protective Action Recommendations to state and local decision makers;
- Implement radiation protection principles, including maintaining exposures as low as reasonably achievable (ALARA);
- Provide support on radiation instrumentation, measurements, sampling, and analysis;
- Provide experts on radiation control and health effects to support decision makers; and
- Support cleanup decision making processes.

RADIOLOGICAL INCIDENT RESPONSE ORGANIZATIONS

EPA personnel responding to a radiological/nuclear incident should be acutely aware of the unique nature of the Federal Government's response mechanism for these types of incidents.

It is FEMA's policy to use the National Response Framework (NRF) structures to coordinate all Federal assistance to state and local governments for nationally

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significant incidents. The NRF includes a Terrorism Incident Law Enforcement and Investigation Annex, which in part describes potential EPA involvement in the Federal law enforcement and investigative response phase of an incident. In a terrorist threat or incident that may involve a chemical, biological, radiological, nuclear, or high-yield explosive (CBRNE) material, the traditional FBI command post will transition into a Joint Operations Center (JOC). The JOC is an interagency command and control center. EPA may be asked to provide a representative to the JOC.

At the scene of a potential or actual terrorist incident, the FBI retains authority for criminal enforcement. EPA response personnel will likely have to work with the FBI to obtain access to a controlled site. EPA Incident Commanders (ICs) may wish to establish an Intelligence/Investigations Officer (IIO) position, in Command Staff, to facilitate this process.

The operations of the interagency Federal Radiological Monitoring and Assessment Center (FRMAC) in a radiological/nuclear response represent a radiation-specific addition to typical NRS responses.[2] A FRMAC is established in response to a request from a Coordinating Agency or state when there is a suspected or actual radiological or nuclear nationally significant incident. The FRMAC provides monitoring and assessment outside any law enforcement-controlled area or facility boundary. The FRMAC is responsible for the following incident objectives:

a. Coordinate Federal radiological monitoring and

[2] Additional information and operating manuals for the FRMAC may be found at http://www.nv.doe.gov/nationalsecurity/homelandsecurity/frmac/manuals.aspx.

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assessment activities;

b. Maintain liaisons with state, local, and other Federal agencies;
c. Maintain radiological monitoring data;
d. Provide monitoring data and radiological assessments, including dose projections and exposure rate contours; and
e. Obtain technical assistance from other Federal, state, and private entities.

RESPONSE WITHOUT THE FRMAC

Figure 18-1 shows a radiological incident response structure that does not use the FRMAC (e.g., in a strictly National Oil and Hazardous Substances Pollution Contingency Plan (NCP) response). The Radiological Operations Branch performs five functions: 1) monitoring the site for radioactivity; 2) radioactive waste management; 3) exclusion zone entry control; 4) infrastructure decontamination; and 5) laboratory support. The Monitoring Group performs real-time surveys and sampling of soil, water, air, and biota. The Laboratory Group includes onsite and/or offsite laboratories depending upon responder needs and may also include the use of data collected by EPA's Airborne Spectral Photometric Environmental Collection Technology (ASPECT) aircraft or ground based system known as ASPECT Asphalt. The Infrastructure Decontamination Group handles decontamination of equipment and vehicles (not people). The Radioactive Waste Management Group ensures the safe handling and disposal of all radioactive waste generated from the incident. It also ensures that disposal complies with

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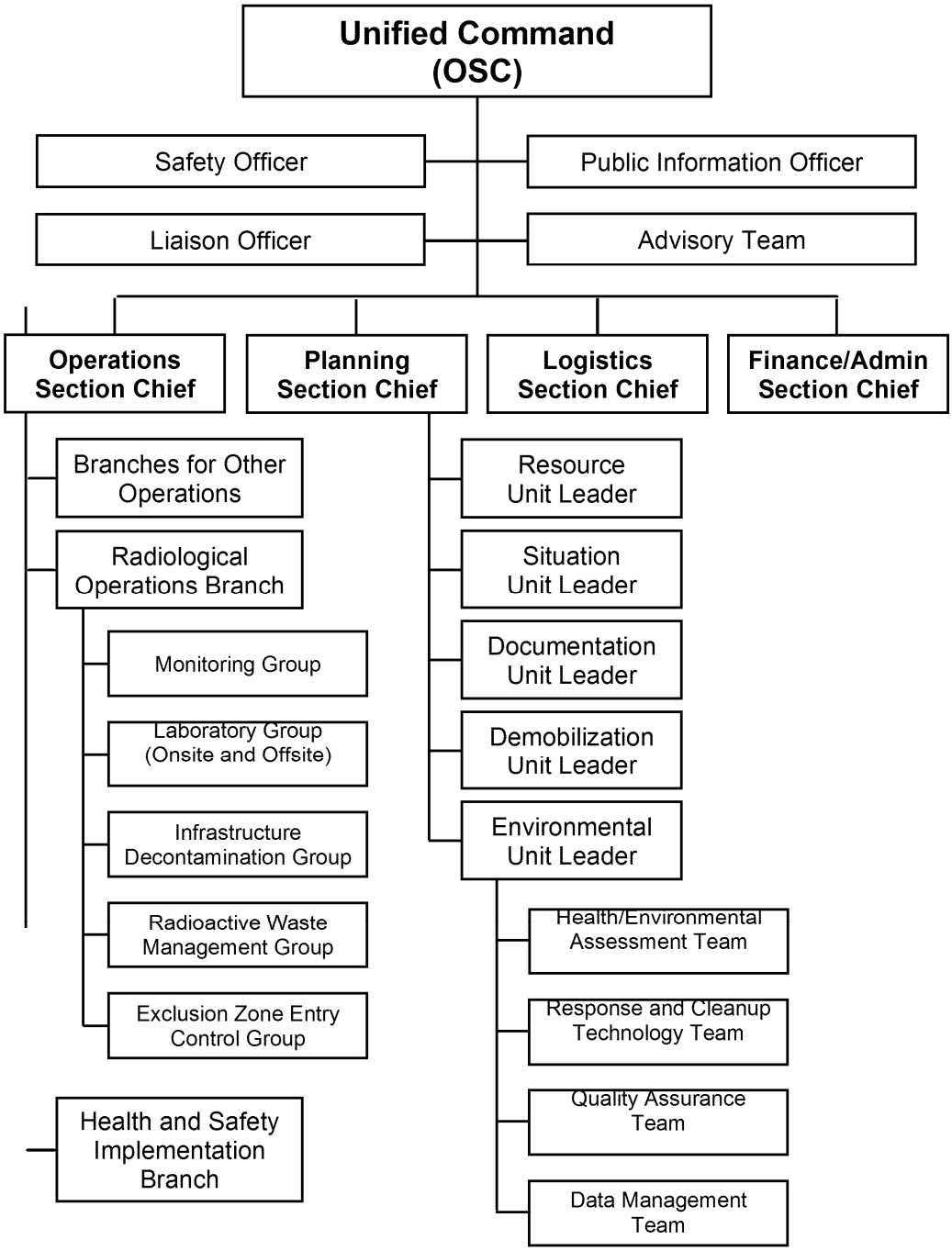
Federal and local laws. The Exclusion Zone Entry Control Group is responsible for the overall entry operations of assigned personnel within the Exclusion Zone Entry Control Group. The Health and Safety Implementation Branch carries out the necessary activities to ensure the health and safety of operations personnel.

Figure 18-1 also depicts the use of an Environmental Unit within the Planning Section. Within the Environmental Unit, the Health/Environmental Assessment Team analyzes environmental data. This Team performs dose assessments and predictions and includes health physicists, fate and transport modelers, risk assessors, and other technical specialists. The Response and Cleanup Technology Team plans the radiation protection strategy during the emergency phases of the incident and the cleanup actions during recovery. The Quality Assurance Team identifies the Data Quality Objectives (DQO), writes the Quality Assurance Project Plans (QAPPs), and functions as an auditing group. The Data Management Team handles the large amount of measurement data and provides data output in tabular, graphic, and geographic information systems (GIS) formats. For less resource intensive responses, the Monitoring Group within the Operations Section could also perform Data Quality Assurance (QA) functions for field data management.

FIGURE 18-1: ICS WITH NO FRMAC, AND EPA AS COORDINATING OR LEAD AGENCY



RESPONSE WITH THE FRMAC

When a FRMAC is established and regardless of which department/agency is the Coordinating Agency or lead agency, the Department of Energy (DOE) provides significant resources to establish the FRMAC as well as staff to manage it initially, during the emergency phase. When DOE response assets first arrive at the site, they will hold an Advance Party meeting with key decision makers, and first responders, to determine how the FRMAC will be integrated into the response management structure. During this meeting, these initial DOE response assets (which will become part of the FRMAC once it is established) will work with the Coordinating Agency and the state(s) to determine their requirements, define the appropriate level and composition of the FRMAC response, and locate a suitable site to conduct operations. It is critical that, in an EPA-led response, EPA participate in this meeting to discuss how the FRMAC will integrate into the response management structure. Responders should work to ensure that open lines of communication are developed and that radiological data are accessible to the FRMAC and all response personnel.

Under the NRF, all Federal, state, and local radiological monitoring assets are expected to coordinate radiological monitoring activities through and provide radiological monitoring data to the FRMAC. During the emergency response phase, DOE has indicated that the FRMAC will integrate into the Incident Management Team (IMT) established at the incident. Once a series of conditions listed in the NRF/NRIA have been met, DOE will transfer control of the FRMAC to EPA to continue long-term

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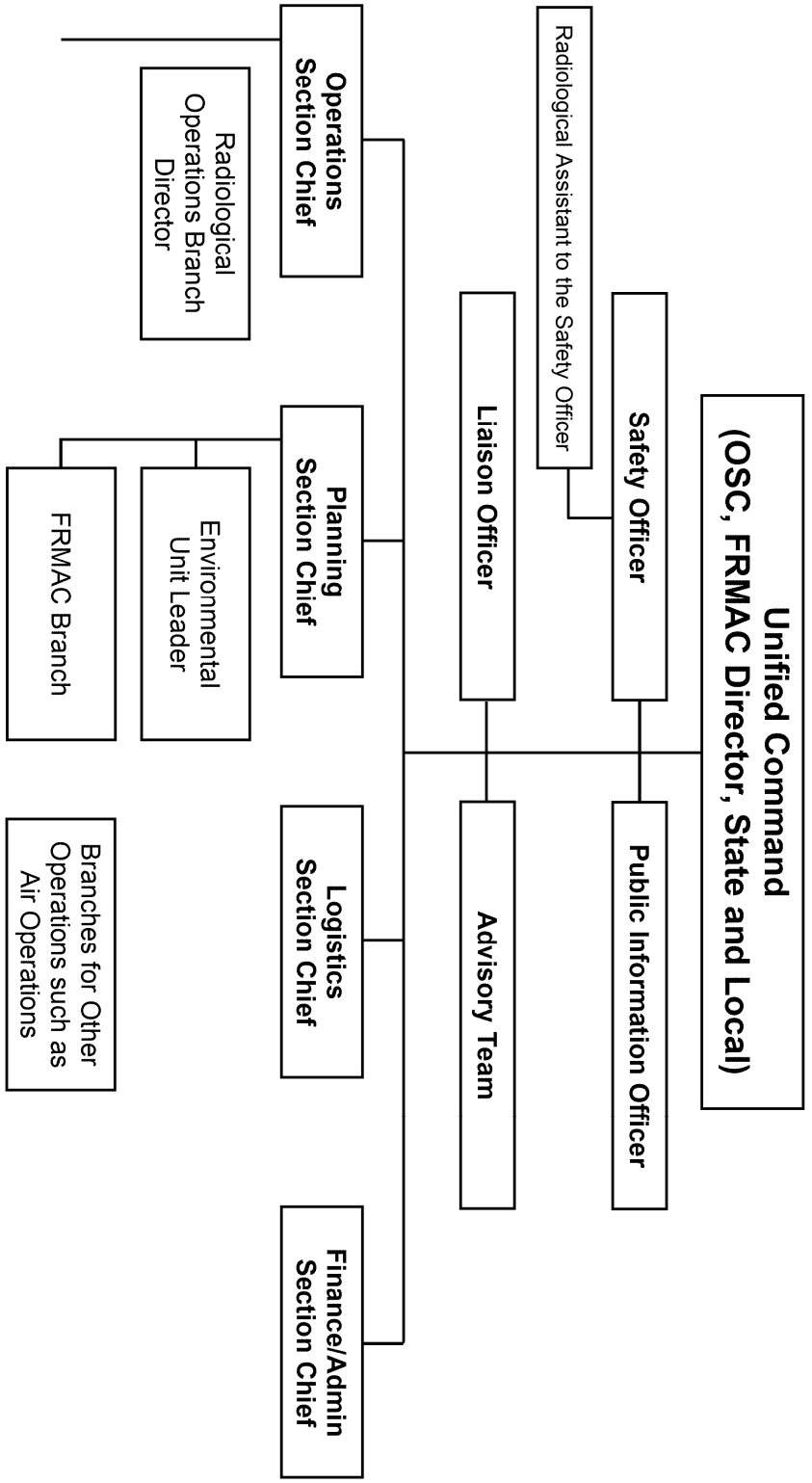
monitoring activities. DOE and other Federal agencies will continue to provide resources. Figure 18-2 shows a potential ICS structure during the post-emergency phase, once EPA has assumed leadership of the FRMAC. It is anticipated that DOE and EPA Radiological Emergency Response Team (RERT) and CBRN CMAT members will staff FRMAC management positions, while other Federal, state, and local monitoring, sampling, and assessment efforts integrate into the staff positions.

The FRMAC's mission does not include incident management, radioactive waste management, or non-FRMAC worker radiation safety, so separate ICS Branches, Groups, etc., must be established to handle these activities.

Additionally, EPA has a policy to immediately release validated data to the public after ensuring proper quality assurance and quality control procedures. EPA is known for its transparency and will continue to follow this process. The FRMAC data review process may not be as timely, and therefore EPA would release data on its own as needed.

FIGURE 18-2: POTENTIAL EPA/FRMAC ORGANIZATION CHART



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FRMAC DIRECTOR – The FRMAC Director oversees the activities of all FRMAC personnel provided by any DOE operations office, DOE laboratory, DOE contractor, and any other Federal or state agency. The Director is responsible for the overall execution of the FRMAC response when DOE is the lead The FRMAC Director is provided by DOE for the emergency and intermediate phases and by EPA after the transition to EPA leadership following the stabilization of the emergency. EPA will assume Federal responsibility for coordinating the intermediate and long-term offsite radiological monitoring, sampling, and dose assessment activities. While the FRMAC is under DOE management, EPA will provide guidance to the FRMAC Director concerning EPA Protective Action Guides (PAGs) and ensure that the data collected by the FRMAC will support planning for long-term monitoring. DOE will provide a transition staff and assets for the post-emergency FRMAC, commensurate with the needs of the response organization. Additional information on the FRMAC may be found in the FRMAC Operations Manual (DOE/NV/25946-980, May 2010) which is currently under revision

ADVISORY TEAM – Another specialized entity specific to radiological response is the Advisory Team for the Environment, Food and Health (also known as the Advisory Team). The Advisory Team includes permanent member Agency Representatives from EPA's Office of Radiation and Indoor Air (ORIA), the EPA CBRN CMAT, the United States Department of Agriculture (USDA), the Centers for Disease Control and Prevention (CDC), and the Food and Drug Administration (FDA), as well as other Federal agencies, as required by the incident, and provides advice on food and health matters. The Advisory Team provides

recommendations (through the Coordinating Agency under the NRF/NRIA) in matters relating to the following:

- Field monitoring;
- Emergency PAGs and their applications;
- Protective action recommendations using data and assessment from the FRMAC;
- Protective actions to prevent or minimize contamination of milk, food, and water to prevent or minimize exposure through ingestion;
- Recommendations related to relocation, reentry, return, and recovery;
- Disposal of contaminated livestock (see Chapter 21 – Animal Emergency Response of this handbook);
- Health and safety advice for the public and for workers;
- Estimated effects of radioactive releases on human health and the environment; and
- Other matters as requested by the Coordinating Agency.

DOE will request activation of the Advisory Team whenever the FRMAC is activated. The Advisory Team typically co-locates with the FRMAC to enable access to FRMAC data and assessments. However, the Advisory Team is an independent entity and may be called upon even when the FRMAC is not activated.

DHS, Coordinating Agencies, and state, tribal and local governments may request support from the Advisory Team by contacting the CDC Director's Emergency Operations Center (EOC).

RADIOLOGICAL ASSISTANT TO THE SAFETY

OFFICER – This person is responsible for the entire worker health physics program. The Radiological Assistant to the Safety Officer is a management and leadership position that ensures that all radiation safety programs and personnel operate in compliance with applicable standards. This position is usually part of the overall safety organization and oversees health physics technicians and other radiation safety professionals. Duties include the following:

a. Review Common Responsibilities (page 3-1);
b. Oversee the personnel monitoring program;
c. Oversee the worker area monitoring program;
d. Oversee personnel protection and decontamination;
e. Develop the Site Radiation Safety Plan;
f. Ensure compliance with appropriate radiation worker protection regulations;
g. Participate in tactical and Planning Meetings;
h. Review Incident Action Plans (IAPs);
i. Investigate accidents;
j. Ensure that the health physics program has the proper staffing and resources; and
k. Maintain Unit/Activity Log (ICS 214 form).

Radiological Operations Branch Director –
The Radiological Operations Branch Director is a management and leadership position that oversees all operational Groups responding to the radioactive hazards. These Groups include site entry, airborne and ground-based monitoring, and laboratory services. This position reports to the Operations Section Chief (OPS) or can act

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as the Section Chief if most of the response actions involve reducing the radiological hazards. Duties include the following:

a. Review Branch Director Responsibilities (page 8-11);
b. Implement the IAPs;
c. Assign specific work tasks to the different operational Groups, in coordination with the Planning Section;
d. Supervise Branch operations;
e. Resolve logistical problems;
f. Attend Planning Meetings;
g. Communicate changes to the IAPs;
h. Debrief upper management; and
i. Maintain Unit/Activity Log (ICS 214 form).

ENVIRONMENTAL UNIT LEADER (ENVL) – In addition to the duties presented in Chapter 9 – Planning Section, the ENVL during a radiological incident is responsible for planning activities addressing radioactive contamination control and management, including radiological health and environmental assessments, protective and remedial actions, data quality assessment, and data management. The ENVL should coordinate closely with the Scientific Support Coordinator (SSC), OPS, the FRMAC Director, the Area Command (AC) Environmental Unit, and Headquarters (HQ) Environmental Unit (if established). Duties include the following:

a. Review ENVL Responsibilities (page 9-13);
b. Coordinate with HQ Environmental Unit;
c. Contribute to incident planning activities;

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d. Communicate and coordinate with the Advisory Team for Environment, Food, and Health; and
e. Maintain Unit/Activity Log (ICS 214 form).

RADIOLOGICAL INCIDENT-SPECIFIC ICS POSITION AND TASK DESCRIPTIONS

DECONTAMINATION SPECIALIST – Decontamination Specialists ensure that incident responders who are identified as having external (surface) contamination on their person are decontaminated to the extent reasonably achievable using appropriate methods in the field. This person works with the health and safety implementation staff and communicates and coordinates with identified professionals (medical facility) on referrals. Duties include the following:

a. Review Common Responsibilities (page 3-1);
b. Perform field decontamination of incident responders, as well as materials and equipment;
c. Refer those with contamination for more intensive decontamination procedures as necessary; and
d. Maintain Unit/Activity Log (ICS 214 form).

SITE ENTRY SPECIALISTS – The Site Entry Specialists, within the Radiological Operations Branch, implement the response actions addressing radioactive contaminant hazards in the hot zone as well as restricting access to the hot zone. This position does not have “authority” over emergency responders. Appropriate training and experience is a necessity for this position. Duties may include the following:

a. Review Common Responsibilities (page 3-1);

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b. Enter controlled contaminated areas to perform critical tasks or gather critical information consistent with applicable health and safety guidance;
c. Assist/escort emergency response workers in the hot zone;
d. Perform radiological monitoring and contamination control activities;
e. Support remedial actions as necessary; and
f. Maintain Unit/Activity Log (ICS 214 form).

MONITORING MANAGER – The Monitoring Manager is responsible for implementing all site monitoring activities. These activities include real-time airborne and ground-based radiation surveys and sampling of various environmental media. The Monitoring Manager reports to the Radiological Operations Branch Director. Duties include the following:

a. Review Common Responsibilities (page 3-1);
b. Ensure proper communication to and from the various monitoring activities;
c. Identify resources needed;
d. Develop the various monitoring programs;
e. Assist in the development of the QAPP and identify, report, and resolve Quality Assurance/Quality Control (QA/QC) problems;
f. Ensure that the monitoring programs work effectively and efficiently;
g. Ensure proper staffing and equipment;
h. Report unsafe conditions;
i. Communicate site monitoring needs to offsite

laboratory; and

j. Maintain Unit/Activity Log (ICS 214 form).

RADNET DEPLOYABLES SPECIALISTS – The RadNet Deployables Specialists are provided by the National Center for Radiological Field Operations (NCRFO) to oversee the RadNet deployable monitoring systems. They have a thorough knowledge of equipment setup, QA/QC, equipment, and data transmission. Duties include the following:

a. Review Common Responsibilities (page 3-1);
b. Oversee the loading and shipping of the stations;
c. Travel to the Staging Area;
d. Identify sites where the units should be placed, in coordination with the RERT Commanders or others as necessary;
e. Manage the activities of the mobilization personnel;
f. Troubleshoot in the field; and
g. Maintain Unit/Activity Log (ICS 214 form).

DATA ACQUISITION OFFICER/RADIO NET CONTROL SPECIALIST – Under instructions from the Monitoring Manager, the Data Acquisition Officer/Radio Net Control Specialist is responsible for recording and documenting all monitoring and sampling data and information transmitted by the field monitoring teams via the two-way radio system or telephone. Duties include the following:

a. Review Common Responsibilities (page 3-1);
b. Relay information to the designated field monitoring teams and receive field monitoring data in return;

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c. Transmit the data to the Monitoring Manager; and
d. Maintain Unit/Activity Log (ICS 214 form).

FIELD TEAM SPECIALISTS – The Field Team Specialists are responsible for executing radiological field monitoring and environmental sampling duties. Duties include the following:

a. Review Common Responsibilities (page 3-1);
b. Use all field survey instrumentation properly;
c. Use all sampling equipment properly;
d. Ensure proper sample identification, tracking, storage, and shipping;
e. Perform proper QA/QC procedures;
f. Report QA/QC and logistical problems;
g. Report unsafe conditions; and
h. Maintain Unit/Activity Log (ICS 214 form).

RADIATION TASK FORCE LEADER (RTFL) – RTFLs are trained field team members responsible for supporting radiological field monitoring and environmental sampling duties. Duties include the following**:**

a. Review Strike Team/Task Force Leader Responsibilities (page 8-14);
b. Perform field surveys and sampling;
c. Ensure proper sample identification, tracking, storage, and shipping;
d. Perform proper QA/QC procedures;
e. Report QA/QC and logistical problems;
f. Report unsafe conditions; and

g. Maintain Unit/Activity Log (ICS 214 form).

LABORATORY TEAM LEADER – The Laboratory Team Leader reports to the Radiological Operations Branch Director and supervises the mobile and fixed laboratories. Specific duties include the following:

a. Review Strike Team/Task Force Leader Responsibilities (page 8-14);
b. Coordinate the resources and activities of the sample control, sample shipping, sample preparation, and mobile laboratory functions;
c. Establish priorities, goals, and incident objectives for these functions;
d. Facilitate the efficient use of personnel and related resources;
e. Interact with the Data Assessment and Quality Assurance Specialist to ensure data quality; and
f. Maintain Unit/Activity Log (ICS 214 form).

MOBILE LABORATORY SPECIALIST – The Mobile Laboratory Specialist reports directly to the Laboratory Team Leader and performs all analyses assigned to the mobile laboratory. These analyses may include preparation, gamma spectral analysis, alpha-beta proportional counting, or gross radioactivity measurements of samples from various site media.

SAMPLE CONTROL SPECIALIST – The Sample Control Specialist receives direction from the Laboratory Team Leader and interacts with Field Team Specialists, the Radiological Assistant to the Safety Officer, Hot Line Specialists, and the Decontamination Specialist. Duties include the following:

a. Review Common Responsibilities (page 3-1);
b. Serve as a single point of contact for delivery of field radiological samples;
c. Ensure proper chain-of-custody management and disposition of all samples; and
d. Maintain Unit/Activity Log (ICS 214 form).

SAMPLE PREPARATION SPECIALIST – The Sample Preparation Specialist receives direction from the Laboratory Team Leader and interacts with Field Team Specialists, the Radiological Assistant to the Safety Officer, Hot Line Specialists, the Mobile Laboratory Specialist, and the Decontamination Specialist on the number and type of samples that will need to be sent to the lab. Duties include the following:

a. Review Common Responsibilities (page 3-1);
b. Serve as a single point of contact for delivery of field radiological samples;
c. Ensure proper management and disposition of all samples; and
d. Maintain Unit/Activity Log (ICS 214 form).

SAMPLE SHIPPING SPECIALIST – The Sample Shipping Specialist also reports to the Laboratory Team Leader and is responsible for packaging and shipping samples requiring analysis offsite. Duties include the following:

a. Review Common Responsibilities (page 3-1);
b. Assure that necessary tracking materials and safety packaging are completed;
c. Assume responsibility for temporary onsite storage of counted samples, including safe radioactive

controls and observation of chain-of-custody requirements; and

d. Maintain Unit/Activity Log (ICS 214 form).

EVENT CONTROL SPECIALISTS – The Event Control Specialists report to the Documentation Unit Leader (DOCL). Duties include the following:

a. Review Common Responsibilities (page 3-1);
b. Document the entire field action;
c. Maintain a complete collection of reports and products distributed;
d. Track staff at the site of the incident;
e. Track health and safety compliance;
f. Maintain a complete record of actions and the event timeline; and
g. Maintain Unit/Activity Log (ICS 214 form).

REPORTS/PRODUCT SUPPORT SPECIALISTS – The Reports/Product Support Specialists also report to the DOCL. Duties include the following:

a. Review Common Responsibilities (page 3-1);
b. Document and track the status of all requests, priorities, and activities;
c. Compile data products, calculations, and other information generated;
d. Ensure that all documentation on activities, correspondence, Situation Reports (SitReps), action requests, lessons learned, and other pertinent information are complete and archived in an accountable, secure, and retrievable form;
e. Prepare data products and site reports in the best

format for distribution; and

f. Maintain Unit/Activity Log (ICS 214 form).

DATA ASSESSMENT AND QUALITY ASSURANCE SPECIALIST –The Data Assessment and Quality Assurance Specialist, who reports to the ENVL, writes the QAPPs, and functions as an auditor. Duties include the following:

a. Review Common Responsibilities (page 3-1);
b. Verify that the data produced during laboratory analysis (at either a fixed or mobile laboratory) meet the QA requirements for that particular analysis;
c. Verify that data are free of transcription errors if any hand entry of data is involved;
d. Verify that data meet the DQO for the radiological emergency;
e. Identify and report QA/QC problems;
f. Assist in the resolution of data quality problems;
g. Report QA problem resolutions to upper management; and
h. Maintain Unit/Activity Log (ICS 214 form).

REMEDIAL SUPPORT SPECIALIST – As a member of the Environmental Unit, the Remedial Support Specialist assists in developing the protective emergency actions and interim/final cleanup remedies. Duties include the following:

a. Review Common Responsibilities (page 3-1);
b. Plan response actions;
c. Design remedial measures;

d. Assist in the development of the IAPs;
e. Work with the Advisory Team; and
f. Maintain Unit/Activity Log (ICS 214 form).

RADIOLOGICAL ASSESSMENT SPECIALIST – As a member of the Environmental Unit, the Radiological Assessment Specialists performs all dose projections and radiological risk assessments that form the basis of the IAPs dealing with mitigating radiation risk during emergency and recovery phases. Duties include the following:

a. Review Common Responsibilities (page 3-1);
b. Model fate and transport;
c. Estimate dose and health/environmental impacts;
d. Interpret monitoring data;
e. Develop Data Quality Objectives (DQO) for monitoring;
f. Assist in the development of the IAPs;
g. Work with the Advisory Team; and
h. Maintain Unit/Activity Log (ICS 214 form).

DOSE ASSESSOR – The Dose Assessor position, which may have both HQ and field components, is responsible for radiological exposure calculations. Duties may include the following:

a. Review Common Responsibilities (page 3-1);
b. Assess radiation doses (incurred or projected) to individuals and populations who may have been or are projected to be exposed to radioactive material;

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c. Perform prospective or retrospective radiation dose assessments; and
d. Maintain Unit/Activity Log (ICS 214 form).

LOGISTICS SPECIALIST – The Logistics Specialist, reporting to the Logistics Section Chief (LSC), is responsible for providing facilities, logistical services, and materials in support of a radiological incident. This person participates in the development of the IAP and Recovery Plan. Duties include the following:

a. Review Common Responsibilities (page 3-1);
b. Handle initial logistics for the response;
c. Provide administrative, logistical, security, facilities, and mechanical systems support to deployed personnel;
d. Establish facilities and communications systems, and arrange food and shelter for responders;
e. Prepare for the arrival of follow-on emergency response assets; and
f. Maintain Unit/Activity Log (ICS 214 form).

EQUIPMENT MANAGER – The Equipment Manager, also reporting to the LSC, is responsible for assuring that the vehicles for transportation and deployment of the emergency response equipment are maintained and ready for use in a timely and safe manner. Duties include the following:

a. Review Common Responsibilities (page 3-1);
b. Keep instruments, equipment, and vehicles operational;
c. Maintain the facility used during emergency

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response;

d. Ensure that instruments, government vehicles, and rental vehicles have been decontaminated, as necessary; and

e. Maintain Unit/Activity Log (ICS 214 form).

REGIONAL RADIATION ADVISOR – A Regional Radiation Advisor(s) will provide in-office radiological technical advice to response personnel as needed. Duties for this regional programmatic position include the following:

a. Review Common Responsibilities (page 3-1);

b. Provide Regional Radiation Program functions in the context of the response;

c. Provide radiological technical assistance to regional management;

d. Coordinate with Federal, state, and local radiation programs;

e. Coordinate regional radiation resources, if applicable;

f. Work directly with the Regional Response Center during emergencies to provide radiation advice and assistance; and

g. Maintain Unit/Activity Log (ICS 214 form).

RADIOLOGICAL INCIDENT RESPONSE ASSETS/ SPECIAL TEAMS

In addition to the EPA Special Teams and other assets identified in Chapter 14 – Hazardous Substances Response, the following resources are also available. For access to any Department of Defense (DOD) assets or teams, contact the EPA HQ Emergency Operations Center (EOC) at the phone number listed on the inside cover, or by contacting the National Response Center (NRC) or Regional Response Team (RRT)/National Response Team (NRT) representatives for DOD.

US Department of Energy/National Nuclear Security Agency (DOE/NNSA) Assets

- **FRMAC** – The FRMAC coordinates the radiological monitoring and assessment activities of 17 Federal agencies with those of state and local agencies. DOE/NNSA establishes and manages the FRMAC in the emergency phase of a response.

- **Aerial Measuring System** – DOE/NNSA maintains aircraft at bases in Nevada and Maryland that can monitor and make plume maps of radiological dispersals. These planes can generally deploy within four hours of notification.

- **Radiological Assistance Program Team** – This team comprises 27 groups of health physicists and support personnel. Usually the first NNSA team to deploy to the scene of an incident, the Radiological Assistance Program Team performs radiological assessment and monitoring.

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- **Radiological Assistance Center/Training Site (REAC/TS)** – REAC/TS, located adjacent to the Oak Ridge National Laboratory, provides medical consultation for treatment of injuries from radiological exposure.

- **Department of Homeland Security Interagency Modeling and Atmospheric Assessment Center (IMAAC)** – assist in real-time assessments of the transport and dispersion of hazardous materials released into the atmosphere and can predict or map the behavior of radiological and other contaminants on a global, regional, or local scale.
- **Accident Response Group** – This group responds to incidents involving US nuclear weapons. Working closely with the Radiological Assistance Program Team, the Accident Response Group helps coordinate DOE or DOD response efforts within restricted areas with those of other responders.

- **Nuclear Emergency Support Team** – This interagency team encompasses all of the DOE/NNSA nuclear emergency response assets, and works to search for, identify, assess, disable, and dispose of any nuclear weapon directed against the United States. After coordinating with other concerned agencies, DOE HQ directs all response team activations and deployments.

US Department of Defense (DOD) Assets

- **US Army Corps of Engineers (USACE), Kansas City District, Nationwide Low-Level Radioactive Waste**

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Disposal Program – This program maintains nationwide disposal contracts that can also be used for the disposal of waste generated from remediation activities associated with a radiological incident.

- **US Army Field Support Command, Safety/Radioactive Waste Directorate** – This entity provides another source of assistance for handling radioactive waste generated as a result of a radiological incident.

- **US Army 20th Support Command (Chemical, Biological, Radiological, Nuclear, and Explosives (CBRNE) Command)** – The CBRNE Command provides a single point-of-contact within the Army when a coordinated response to the threat of or use of CBRNE agents or materials is needed anywhere in the world.

- **US Marine Corps, Chemical Biological Incident Response Force (CBIRF)** – The CBIRF can respond nationally for domestic consequence management operations to deal with a chemical, biological, radiological, or nuclear threat. It coordinates initial relief efforts and provides security, detection, identification, expert medical advice, and limited decontamination of personnel and equipment.

- **US National Guard Weapons of Mass Destruction (WMD) Civil Support Team (CST)** – This unit supports local, state, and Federal agencies responding to an attack involving CBRNE weapons. The teams can provide advice on event mitigation, medical treatment, reach-back capabilities, and other response

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concerns and can use a wide range of detection, monitoring, and sampling devices.

- **Defense Threat Reduction Agency (DTRA) CBRN Consequence Management Advisory Team (CMAT)** This team helps DOD lead responders in assessing and predicting contamination after a nuclear accident. It advises on overall Federal response procedures and requirements associated with a nuclear weapon accident.

- **Medical Radiobiology Advisory Team** – This team provides expertise in radiation risk communication, personnel dose estimation, handheld nuclide identification, and radiation medicine. It may deploy with the CMAT.

- **Air Force Radiation Assessment Team** – This team of deployable health physicists, industrial hygienists, and laboratory technicians provides a full range of equipment, force protection dosimetry, and consultation about health physics, industrial hygiene, and environmental quality.

- **Radiological Advisory Medical Team** – This US Army rapid-response team provides guidance to the Coordinating Agency and/or local medical authorities on potential health effects to personnel, as well as limited medical support to response teams in controlled areas. It evaluates survey data to guide responsible officials using contaminated areas and monitors medical facilities and equipment where contaminated patients have been evacuated.

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US Department of Justice (DOJ) Assets

- **Federal Bureau of Investigation (FBI) Hazardous Materials Response Unit (HMRU)** – This entity responds to criminal acts and incidents involving the use of hazardous materials and supports crime scene and evidence-related operations in cases involving chemical, biological, and radiological agents and hazardous waste materials.

US Department of Labor (DOL) Assets

- **Occupational Safety and Health Administration (OSHA) Health Response Team (HRT)** – Based in Salt Lake City, UT, this team responds to occupation-related emergencies that may involve potentially catastrophic releases of hazardous materials. It also coordinates the four Specialized Response Teams (SRTs) (including the radiological team), which are designed to help protect responder safety and health for incidents involving chemical, biological, and radiological emergencies, as well as structural collapses.

US Department of Health and Human Services (HHS) Assets

- The Advisory Team for the Environment, Food, and Health, chaired by HHS, is an interagency team that develops Federal Protective Action Recommendations and provides them to the Coordinating Agency; for Nationally Significant Incidents it provides them to DHS. The team, which typically co-locates with the FRMAC, is chaired by CDC and includes members

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from EPA (ORIA), USDA, and FDA.

REFERENCES

- National Response Framework, Nuclear/Radiological Incident Annex, DHS, June 2008. http://www.fema.gov/pdf/emergency/nrf/nrf_nuclearradiologicalincidentannex.pdf

- OSC Radiological Response Guidelines, EPA, October 2006.
- Turnback Guidance for EPA Personnel Responding to Radiological Emergencies, EPA Memorandum, December 07, 2006.
- PAG Manual: Protective Action Guides and Planning Guidance for Radiological Incidents" (2013). http://www.epa.gov/radiation/rert/pags.html
- Compendium of Special Teams, Capabilities and Assets, EPA, February 4, 2006.
- FRMAC Operations Manual, DOE/NV/25946-980, May 2010.
- Planning Guidance for Response to a Nuclear Detonation, June 2010. http://www.epa.gov/radiation/docs/er/planning-guidance-for-response-to-nuclear-detonation-2-edition-final.pdf

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CHAPTER 19

BIOLOGICAL INCIDENTS

As applicable, consult Chapter 14 – Hazardous Substances Response and Chapter 20 – Chemical Warfare Agent Incidents of this Incident Management Handbook (IMH) regarding establishment and use of ICS.

A biological incident will likely be responded to under the National Response System (NRS). Only the organization and task descriptions pertinent to biological Incident Command System (ICS) positions, functions, and tasks are discussed in this chapter.

A biological agent is not a hazardous substance as defined by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), but may be a "pollutant or contaminant." CERCLA provides authority for EPA to respond to "a release or substantial threat of release… of any pollutant or contaminant which may present an imminent and substantial danger to public health or welfare…" Under CERCLA the term "pollutants or contaminants" encompasses just about anything. By definition, such substances include compounds that upon exposure "will or may reasonably be anticipated to cause" certain specified harmful health effects. While EPA can respond to and clean up a site polluted by either a hazardous substance or a pollutant or contaminant, the statute does not authorize EPA to recover its cleanup costs from private parties or to issue an order directing the parties to perform a cleanup when the substance involved is only a pollutant or contaminant. In addition, many releases of pollutants or contaminants do not meet the

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requirement that there be an “imminent and substantial danger” which is a higher threshold than that for hazardous substances. Although, authorities exist under CERCLA to respond, the response will likely be conducted with the interagency under the Stafford Act.
EPA can also respond under the National Response Framework, as the lead for the response under ESF-10 and the Biological Incident Annex.

Federal On-Scene Coordinators (OSCs) are encouraged to consult Chemical, Biological, Radiological and Nuclear Consequence Management Advisory Team (CBRN CMAT), prior to responding to a biological incident for the latest technical, scientific and operational information.

EPA personnel responding to a biological terrorism incident should be acutely aware of the unique nature of the Federal Government’s response mechanism for these types of incidents.
The National Response Framework (NRF) includes a Terrorism Incident Law Enforcement and Investigation Annex, which in part describes potential EPA involvement in the Federal law enforcement and investigative response phase of an incident. In a terrorist threat or incident that may involve a chemical, biological, radiological, nuclear, or high-yield explosive (CBRNE) material, the traditional FBI command post will transition into a Joint Operations Center (JOC). The JOC is an interagency command and control center. EPA may be asked to provide a representative to the JOC.

At the scene of a potential or actual terrorist incident, the FBI retains authority for criminal enforcement. EPA response personnel will likely have to work with the FBI to

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obtain access to a controlled site. EPA Incident Commanders (ICs) may wish to establish an Intelligence/Investigations Officer (IIO) position, in Command Staff, to facilitate this process.

The Department of Health and Human Services (HHS) is designated the Primary Agency for Emergency Support Function (ESF) #8 – Public Health and Medical Services Annex and serves as the Federal Government's lead agency for the public health and medical preparation and planning for and response to a biological terrorism attack or naturally occurring outbreak that results from either a known or novel pathogen, including an emerging infectious disease. If animal issues are involved, ESF #11 may be activated (refer to Chapter 21 – Animal Emergency Response). For both ESF-8 and ESF-11, EPA is a supporting agency.

ICS ORGANIZATION

The ICS organization charts presented in this chapter highlight key functional positions/units that may be established for a biological response. These charts depict examples of organizational structures that can be utilized in a potential biological response. Figure 19-1 shows an organization chart for a Unified Command (UC) during an emergency response phase, while Figure 19-2 shows a UC during the cleanup phase of a biological incident.

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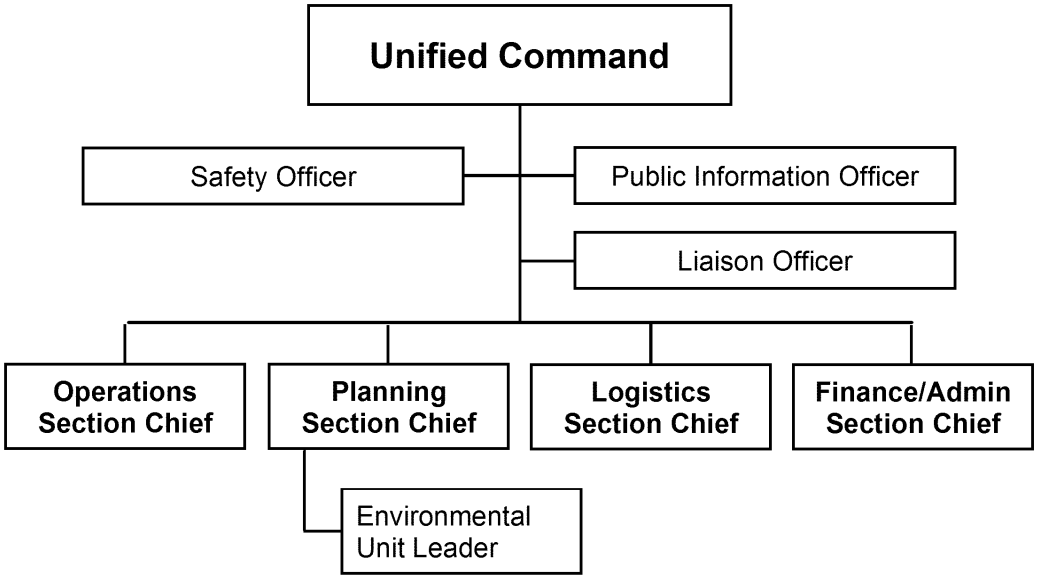
FIGURE 19-1: INITIAL RESPONSE PHASE/CRISIS MANAGEMENT PHASE



Unified Command

- Law Enforcement (FBI*)
- Fire and Rescue
- Facility/Site Manager

* FBI is the lead Federal agency for criminal investigations of terrorist acts and intelligence collection activities within the United States.

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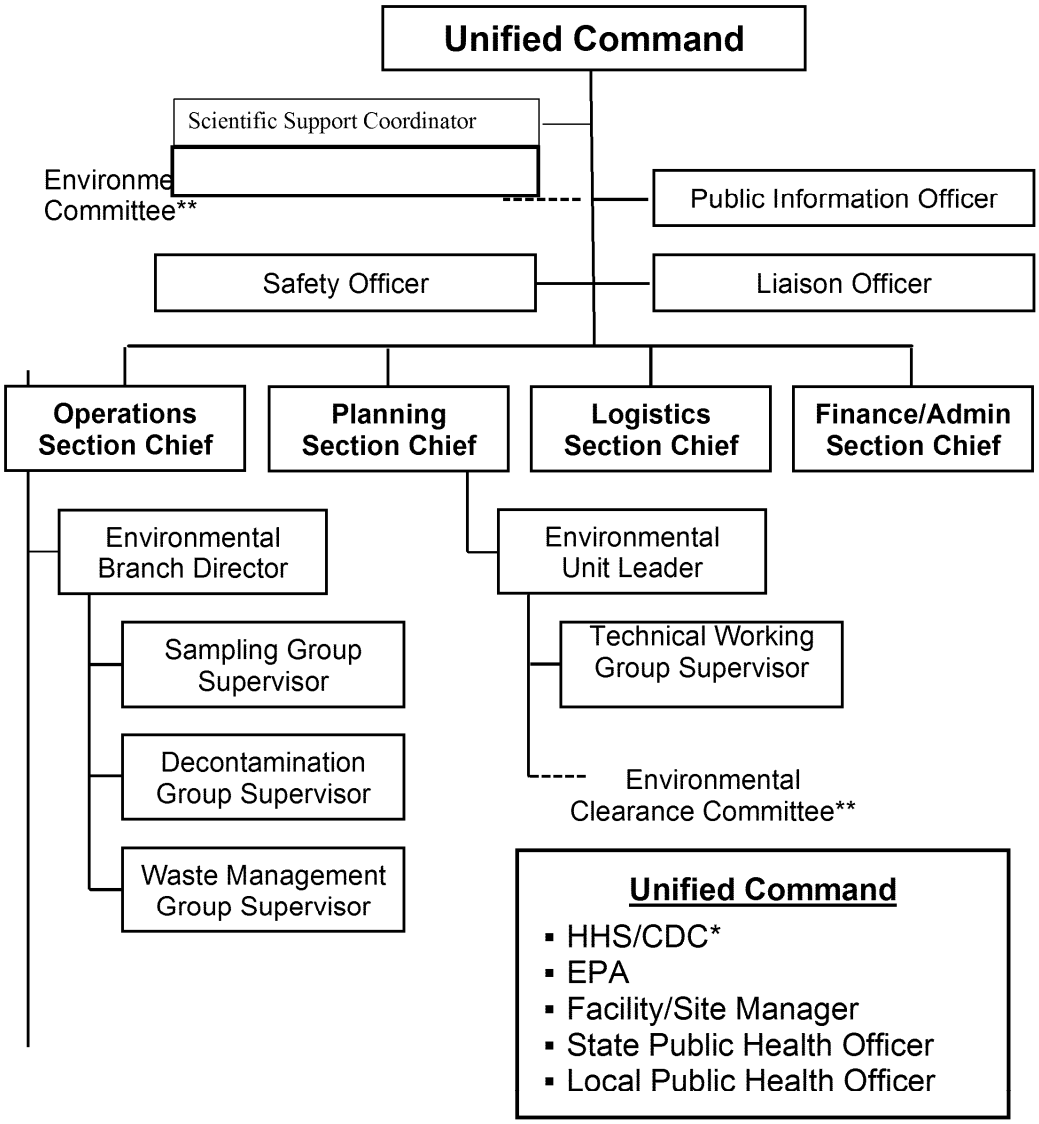
FIGURE 19-2: CONSEQUENCE MANAGEMENT PHASE



* HHS is the Federal lead agency, under ESF #8, for the public health/medical response to a biological incident. EPA, under ESF 10 is the Federal lead for the environmental response.

**At the discretion of the IC, the ECC may either report directly to the IC or the ENVL. The ECC will likely function under the direction of the lead local public health agency.

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BIOLOGICAL INCIDENT ICS POSITIONS AND TASK DESCRIPTIONS

ENVIRONMENTAL BRANCH DIRECTOR (EBD) – Under the direction of the Operations Section Chief (OPS), the EBD is responsible for, but not limited to, environmental sampling, air monitoring, decontamination of structures, building contents and outdoor spaces, waste management, and construction and engineering activities inside and outside the hot zone. Other tasks may include the following:

a. Review Branch Director Responsibilities (page 8-11);
b. If requested during initial phases of consequence management, collaborate with law enforcement's efforts to collect forensic evidence samples to enhance response sampling efficiency and effectiveness (e.g., dual purpose sampling) and offer EPA's environmental sampling expertise to assist them in assessing and collecting of forensic evidence;
c. Secure potentially contaminated areas, prior to characterization activities, to prevent cross-contamination and dispersal of bio-agents;
d. Ensure initial characterization and decontamination activities focus on critical areas; and
e. Maintain Unit/Activity Log (ICS 214 form).

SAMPLING GROUP SUPERVISOR (SGS) – Under the direction of the EBD, the SGS is responsible for assisting in the development of sampling strategies, as well as selection of appropriate sample collection and analytical methods. Other tasks and considerations may include the

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following:

a. Review Sampling Group Supervisor Responsibilities (page 14-20);
b. Assist in the development and implementation of sampling strategies and plans;
c. Implementation of Quality Assurance/Quality Control (QA/QC) Plans developed by the Environmental Unit Data Management Team; and
d. Maintain Unit/Activity Log (ICS 214 form).

DECONTAMINATION GROUP SUPERVISOR (DGS) – Under the supervision of the EBD, the DGS is responsible for implementing the remediation action. Tasks for the DGS include the following:

a. Review Division/Group Supervisor Responsibilities (page 8-12);
b. Working with a Technical Working Group (TWG) (if established), review the clearinghouse of information on decontamination technologies; review TWG recommendation on appropriate technology and application parameters; and
c. Maintain Unit/Activity Log (ICS 214 form).

WASTE MANAGEMENT GROUP SUPERVISOR (WMGS) Under the direction of the EBD, the WMGS' primary responsibility is waste management, including treatment and disposal. Specific tasks for the WMGS include the following:

a. Review Division/Group Supervisor Responsibilities (page 8-12);
b. Estimate the quantity of waste to be generated;

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c. Identify waste management and disposal options;
d. Develop a waste management plan that includes: waste classification, removal, labeling, staging and storage, onsite and offsite treatment and disposal options, transportation, shipping papers, and "offsite" permits required by Federal, state, and/or local regulations; and
e. Maintain Unit/Activity Log (ICS 214 form).

ENVIRONMENTAL UNIT LEADER (ENVL) – Under the direction of the Planning Section Chief (PSC), the ENVL may be responsible for the following tasks during a biological incident:

a. Review Environmental Unit Leader Responsibilities (page 9-12);
b. Provide information and data to the IC/UC and lead local public health organization to assist in establishing a clearance goal;
c. Coordinate with Headquarters (HQ) Environmental Unit if established;
d. Coordinate with the Operations Section;
e. Utilize roster of Subject Matter Experts (SMEs) maintained by CBRN CMAT for biological responses, or other sources, to establish TWGs early on in the response;
f. Identify laboratories;
g. Establish Data Management Team to develop QA/QC procedures;
h. Work with local public health agency, in establishment of an interdisciplinary Environmental Clearance Committee (ECC) to assist in

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determining whether site-specific cleanup goals have been met;

i. Coordinate and submit requests for Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) crises exemptions (or quarantine exemption) that may be required for use of selected decontamination chemicals;

j. Obtain any necessary permits; and

k. Maintain Unit/Activity Log (ICS 214 form).

TECHNICAL WORKING GROUP SUPERVISOR (TWGS)
Numerous TWGs may be established during a response to address sampling, decontamination, waste management, etc. Reporting directly to the ENVL, the TWGS may:

a. Review Division/Group Supervisor Responsibilities (page 8-12);

b. Develop an incident-specific Environmental Characterization and/or Clearance Sampling and Analysis plan;

c. Recommend a clearance goal to the Incident Commander (IC) using a risk-based decision making framework;

d. Determine appropriate decontamination strategy, technology and necessary application parameters;

e. Develop a waste management strategy and/or plan; and

f. Maintain Unit/Activity Log (ICS 214 form).

ENVIRONMENTAL CLEARANCE COMMITTEE LEADER (ECCL) – An Environmental Clearance Committee (ECC) may be established to serve as an independent body of subject matter experts (SMEs) that may

include representatives from other Federal agencies, state/local officials, industry, academia, and building owners/operators. The ECC provides recommendations to the IC/UC on whether or not sampling data supports achievement of site clearance goals. Under the direction of the local public health agency, the ECCL will:

a. Review Common Responsibilities (page 3-1);
b. Conduct a comprehensive review of the overall remediation process and associated data to make recommendations to the IC/UC on whether the clearance goals have been met; and
c. Maintain Unit/Activity Log (ICS 214 form).

SPECIAL TEAMS AND ASSETS

In addition to the Special Teams and other assets identified in Chapter 14 – Hazardous Substances Response, the following resources and phone numbers are also available. For access to any Department of Defense (DOD) assets or teams contact the EPA HQ Emergency Operations Center (EOC) at the phone number listed on the inside cover.

Environmental Response Laboratory Network (ERLN) – Refer to page 6-9 (Environmental Data Management) and page 14-29 (Hazardous Substances Response) for a description of the ERLN.

Occupational Safety and Health Administration (OSHA), Specialized Response Teams (SRTs) – In order to enhance their response capabilities for incidents involving chemical, biological, and radiological

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emergencies, as well as structural collapses, OSHA created four Specialized Response Teams (SRTs) to support the IC/UC in the areas of responder safety and health: 1) the chemical team (e.g., toxic industrial chemicals and materials, and chemical warfare agents), 2) the biological team, 3) the radiological team, and 4) the structural collapse team. OSHA's Health Response Team coordinates the SRTs. The SRTs consist of seven to eight experts that can deploy rapidly when an emergency occurs. The SRTs are comprised of certified industrial hygienists, professional engineers, occupational physicians, and specialized safety experts.

US Army's Chemical Biological Rapid Response Team (CB-RRT) – The CB-RRT can provide technical advice and assessment support to the IC/UC on biological and chemical warfare agents. However, CB-RRT personnel are not trained to make entry into the hot zone. The CB-RRT can assist in the detection, neutralization, containment, and disposal of chemical, biological, radiological, nuclear, or high-yield explosive (CBRNE) materials.

US Army's Medical Research Institute of Infectious Diseases (USAMRIID) – The USAMRIID, located at Fort Detrick, MD, serves as the lead DOD laboratory and research center for medical aspects of biological warfare defense. The Institute plays a key role in the study of highly hazardous infectious agents requiring maximum containment. The program also includes a deployable team for investigation and treatment during actual biological events.

US Army's Edgewood Chemical Biological Center (ECBC) – The ECBC, located in Edgewood, MD, is the

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nation's principal research and development center for chemical and biological defense. ECBC develops technology in the areas of detection, protection, and decontamination. The ECBC, in partnership with EPA's National Homeland Security Research Center (NHSRC) has developed the Homeland Defense Chemical/Biological (C/B) Helpline Database to provide responders with extensive data for use in responding to a chemical or biological terrorist event.

US Marine Corps, Chemical Biological Incident Response Force (CBIRF) – The Marine Corps created CBIRF to provide a rapid response force to counter a chemical/biological terrorist threat. Although CBIRF is primarily dedicated to the National Capital Region, they are a national response asset that can be tasked by Northern Command (NORTHCOM) for domestic consequence management operations to deal with a CBRNE threat. CBIRF can provide a number of significant capabilities to include coordinating initial relief efforts, security, detection, identification, expert medical advice, and limited decontamination of personnel and equipment. The CBIRF team can make initial entry into the exclusion zone in Level "A" personal protective equipment (PPE) to identify and sample unknown chemical/biological agent(s), locate casualties, and perform initial medical assessments, and stabilize and evacuate casualties to the decontamination area.

US Army Soldier Biological Chemical Command (SBCCOM) – SBCCOM maintains the ECBC and Homeland Defense and Security Information Analysis Center (HDIAC) to assist military and civilian organizations in planning for and responding to a CBRNE event.

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SBCCOM conducts research, concept exploration, demonstration, validation, engineering, manufacturing, and development for production of chemical and biological defense systems. SBCCOM has subject matter experts (SMEs) in nuclear, biological, and chemical agent recognition; decontamination methods, sample collection, and detection methods; PPE selection and use and practical exercises; near real-time monitoring; onsite analysis; demolition of former chemical/biological process facilities; site remediation; and environmental investigation.

US Army's Technical Escort Unit (TEU) – The TEU can assist in transporting and escorting unconventional munitions and material—nuclear, biological, and chemical. Its core capabilities involve chemical, biological, and explosive ordinance disposal, reconnaissance, recovery, sampling, detection, monitoring, limited decontamination, Department of Transportation (DOT) packaging, transportation, disposal, and performing or recommending final disposition of weaponized and non-weaponized chemical and biological materials and hazards encountered.

Department of Health & Human Services (HHS), Centers for Disease Control and Prevention (CDC), National Center for Environmental Health (NCEH) – The NCEH identifies potential health hazards, recommends and evaluates methods of preventing injuries, and studies the aftermath of disasters and other major emergencies to learn new ways of mitigating the effects of future disasters. The Emergency and Environmental Health Services (EEHS) is a division of CDC's NCEH. The EEHS can

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respond to national and international emergencies, and provide technical support for public health activities during environmental disasters, disease outbreak investigations, food safety, water quality, and sanitation issues. The EEHS maintains a Laboratory Response Team that can respond 24/7 to a chemical terrorism or other emergency event anywhere in the country, within two hours. The Environmental Public Health Readiness Branch (EPHRB) serves as CDC's primary all-hazards response unit.

HHS CDC Agency for Toxic Substances and Disease Registry (ATSDR) Emergency Response Teams – The ATSDR is an agency of the HHS. The mission of ATSDR is to serve the public by using the best science, taking responsive public health actions, and providing trusted health information to prevent harmful exposures and disease related to toxic substances. ATSDR Emergency Response Teams are available 24/7, and are comprised of toxicologists, physicians, and other scientists available to assist during an emergency. Most human health advice is provided by telephone to response professionals on the scene, but onsite assistance is available upon request of the IC.

HHS CDC Laboratory Response Network (LRN) – The LRN mission is to maintain an integrated national and international network of laboratories that are fully equipped, employ advanced technologies, and increase capacity to respond to biological or chemical terrorism, emerging infectious diseases, and other public health threats and emergencies.

The Integrated Consortium of Laboratory Networks

(ICLN) - a system of laboratory networks capable of integrated and coordinated response to and consequence management of acts of terrorism and other major incidents requiring laboratory response capabilities. Integrated agencies include the Department of Agriculture, Department of Commerce, Department of Energy, Department of Health and Human Services, Department of Homeland Security, Department of Interior, Department of Justice, Department of State, and the Environmental Protection Agency.

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CHAPTER 20

CHEMICAL WARFARE AGENT INCIDENTS

Chemical warfare agent releases will result in a response under the National Response System (NRS). As applicable, consult Chapter 14 – Hazardous Substances Response, Chapter 18 – Radiological/Nuclear Incidents, and Chapter 19 – Biological Incidents of this Incident Management Handbook (IMH) regarding establishment and use of the Incident Command System (ICS) when a chemical warfare agent release occurs.

EPA personnel responding to an incident where a chemical agent is involved should be acutely aware of the unique nature of the Federal Government's response mechanism for these types of incidents..
It is FEMA's policy to use the National Response Framework (NRF) structures to coordinate all Federal assistance to state and local governments for nationally significant incidents. The NRF includes a Terrorism Incident Law Enforcement and Investigation Annex, which in part describes potential EPA involvement in the Federal law enforcement and investigative response phase of an incident. In a terrorist threat or incident that may involve a chemical, biological, radiological, nuclear, or high-yield explosive (CBRNE) material, the traditional FBI command post will transition into a Joint Operations Center (JOC). The JOC is an interagency command and control center. EPA may be asked to provide a representative to the JOC.

The FBI, along with all other Federal departments and agencies, has been directed to adopt the National Incident Management System (NIMS). At the scene of a potential or

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actual terrorist incident, the FBI retains authority for criminal enforcement. EPA response personnel will likely have to work with the FBI to obtain access to a controlled site. Regardless of how the FBI establishes a command structure, EPA ICs will likely carry out their response operations using a standard hazardous substances ICS structure. EPA Incident Commanders (ICs) working with the FBI may wish to establish an Intelligence/Investigations Officer (IIO) position, in Command Staff, to facilitate this process.

ICS ORGANIZATION CHARTS FOR CHEMICAL WARFARE AGENT SCENARIO

The ICS organization charts presented in this chapter highlight key functional positions/units that may be established for a chemical agent response. These charts depict examples of hypothetical ICS organizations developed for two phases of a chemical agent response scenario at a facility. They include ICS organizations for a Unified Command (UC) during the initial response phase and a UC during the cleanup/restoration phase. In the initial response phase, the local fire and hazardous materials (hazmat), police, and health departments respond to the emergency and are responsible for establishing an ICS or UC structure to manage on-scene resources, conduct life safety operations (e.g., victim evacuation, rescue, decontamination, medical treatment), conduct chemical warfare agent, biological agent or radiologicalidentification, and initiate the criminal investigation and evidence collection activities. During this phase, three Groups (Hazmat, Law Enforcement and Mass Casualty) may be established in the Operations Section. In the cleanup/restoration (consequence management)

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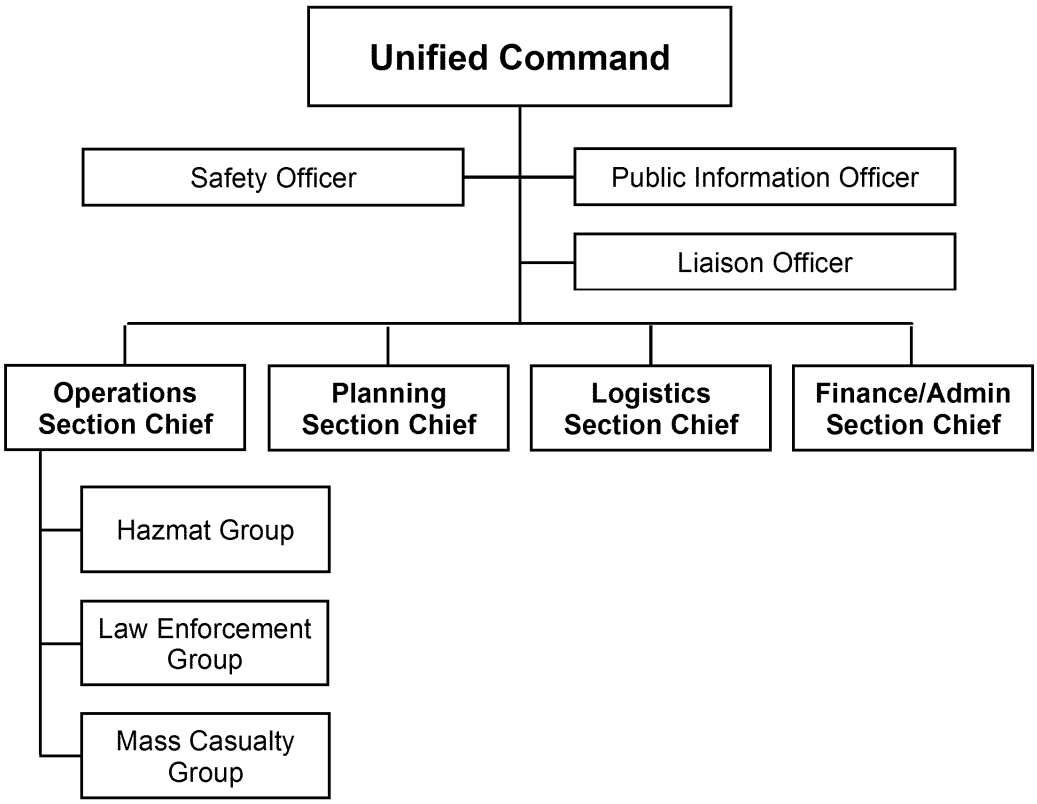
phase, four Branches (Hazmat, Environmental, Law Enforcement, and Medical) may be established in the Operations Section to increase management span-of-control of additional functions. The Hazmat Branch continues to manage the hot zone, contamination reduction zone, decontamination line, rest and shelter areas, entry and egress points, care and maintenance of monitoring equipment, immediate support functions, health and safety, and security. In addition, the Hazmat Branch assists entry teams in donning and doffing PPE, and performs medical monitoring of personnel in the hot zone.

Upon arrival onsite, EPA establishes an Environmental Branch in the Operations Section to carry out environmental characterization and restoration activities including decontamination of buildings, semi-enclosed structures, outdoor areas and sensitive items. The Environmental Branch is responsible for environmental sampling, air monitoring, waste management/disposal and decontamination methods inside and outside the hot zone. EPA establishes an Environmental Unit in the Planning Section. The Environmental Unit is responsible for planning and strategy (e.g., site characterization strategies, sampling and analysis plan, quality assurance, laboratory networking, facility decontamination plan, containment/barrier strategies, fumigation options, decontamination verification methods, environmental clearance, re-occupancy plans), and will coordinate with Headquarters (HQ) Environmental Unit for a Nationally Significant Incident. The Environmental Unit may also establish Technical Working Groups (TWGs) as needed to support operations. The Environmental Unit maintains very close liaison with the Operations Section in the development of tactical plans and coordinates with the

Scientific Support Coordinator (SSC) in Command Staff. The Operations Section has overall responsibility for developing and implementing tactical operations designed to achieve the incident objectives established by the UC. An Environmental Clearance Committee (ECC) may be established to serve as an independent body of subject matter experts (SMEs) that may include representatives from other Federal agencies, state/local officials, industry, academia, and building owners/operators. The ECC provides recommendations to the IC/UC on whether or not sampling data supports achievement of site clearance goals.

FIGURE 20-1: INITIAL RESPONSE PHASE – CHEMICAL AGENT SCENARIO



Unified Command

- Law Enforcement (FBI*)
- Fire and Rescue
- Facility/Site Manager

* FBI is the lead Federal agency for criminal investigations of terrorist acts and intelligence collection activities within the United States.

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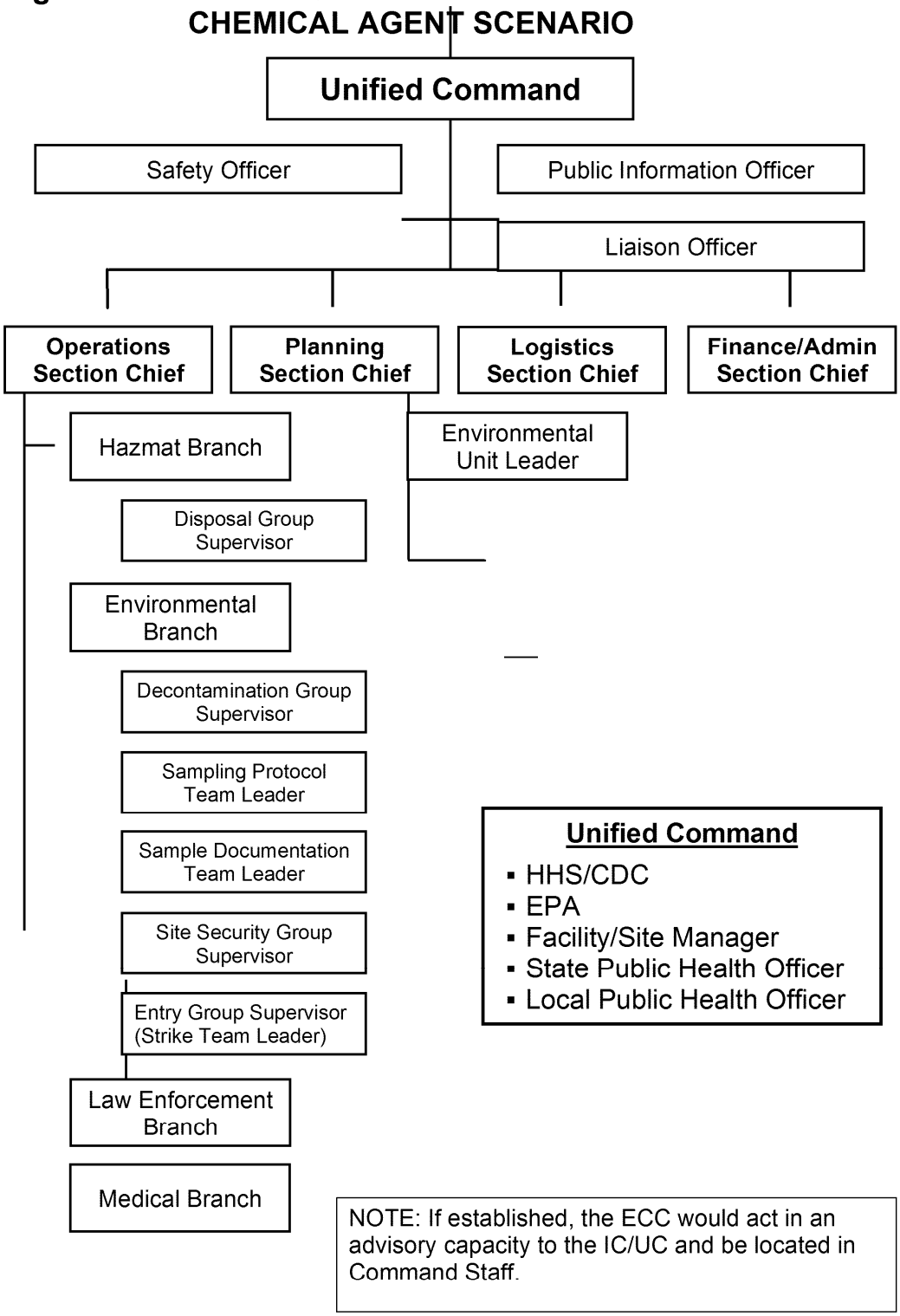
Figure 20-2: CONSEQUENCE MANAGEMENT PHASE – CHEMICAL AGENT SCENARIO



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CHEMICAL WARFARE AGENT SPECIFIC ICS POSITIONS AND TASK DESCRIPTIONS

Only those ICS positions that have the potential to be staffed by EPA personnel and tasks specific and unique to chemical agent incident missions will be described in this section. Persons assigned the common positions consistent with the NIMS organization should refer to Chapters 7 through 11 of this Handbook for their position/task descriptions and checklists. In addition to the Special Teams and other assets identified in Chapter 14 – Hazardous Substances Response, the following resources and phone numbers are also available. For access to any Department of Defense (DOD) assets or teams contact the EPA HQ Emergency Operations Center (EOC) at the phone number listed on the inside cover.

INCIDENT COMMANDER (IC) – Tasks specific to a chemical agent incident are to:

a. Review IC responsibilities (page 7-2);

b. Assesses the need for additional Federal resources, including EPA Special Teams. Some of the Federal resources for a chemical agent response are listed at the end of this chapter and can be requested through the EPA HQ EOC;

c. Consider establishing the following:

- Hazmat Branch/Group – to deploy a Reconnaissance Team, sample/monitor, set up decontamination for responders, and develop a plan of action for containment and control of chemical agents.

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- Medical Group – to provide emergency medical care for responders.
- Law Enforcement Group – to coordinate with law enforcement agencies onsite security, evidence collection and control, and obtain intelligence information. (May be established after the FBI relinquishes site control).

d. Work to identify and address strategic and tactical issues; and

e. Maintain Unit/Activity Log (ICS 214 form).

HAZARDOUS SUBSTANCE/MATERIALS (HAZMAT) GROUP SUPERVISOR – Tasks specific to chemical agent incidents, in support of responders, are:

a. Review Division/Group Supervisor Responsibilities (page 8-12);

b. Review the Hazardous Substance/Materials Group tasks in Chapter 14 of this Handbook;

c. Coordinate support and integration into the ICS structure, of EPA Special Teams and other Federal assets;

d. Ensure that information regarding the agent(s) and patient symptoms are relayed to the Medical Group;

e. Determine hazards presented by the incident ;

f. Ensure availability and determine type of emergency responder decontamination;

g. Coordinate with SO on Health and Safety Plan (HASP);

h. Recommend best protective actions (e.g., evacuation, shelter-in-place);
i. Assist in the development of reentry procedures if applicable; and
j. Maintain Unit/Activity Log (ICS 214 form).

CHEMICAL WARFARE AGENT INCIDENT TECHNICAL ASSETS

Many resources for a chemical agent incident response are similar to those required for a hazardous substance incident response. In addition to the Special Teams and other assets identified in Chapter 14, the following resources are also available. For access to any DOD assets or teams contact the EPA HQ EOC at the phone number listed on the inside cover.

Chemical Biological Incident Response Force (CBIRF) CBIRF is a US Marine Corps response unit located at Camp Lejune, NC. It provides a highly trained rapid response force capable of providing consequence management (threat identification, casualty extraction, personnel decontamination and medical triage/treatment/ stabilization) for terrorist-initiated attacks in order to mitigate the effects of multiple/mass casualty incidents. It also maintains an information “reach-back” capability that allows quick access to a cadre of CBRNE subject matter and response experts for consulting purposes.

US Army Technical Escort Unit (TEU) – TEU provides a worldwide, quick response capability to conduct field sampling, identification and verification, monitoring,

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recovery, decontamination, escort, and mitigation of hazards associated with WMD materials. The operational component of TEU is the Chemical/Biological Response Team (CBRT). CBRTs are available from Aberdeen Proving Ground, MD, Dugway Proving Ground, UT, and Pine Bluff Arsenal, AR.

Army Material Command Treaty Laboratory, Soldier Biological Chemical Command (SBCCOM) – The Army Material Command Treaty Laboratory provides an onsite analytical laboratory capability. The laboratory is capable of analyzing chemical surety materials and foreign chemical warfare agents. The laboratory also maintains an analytical spectra database that provides the capability for analyzing other hazardous industrial chemicals. The laboratory is comprised of a series of transportable modules which contain analytical instruments such as flame photometric/ mass selective detectors, fume hood, and all supporting equipment such as electrical generators for short-term power requirements. The laboratory is located at Aberdeen Proving Ground, MD.

Weapons of Mass Destruction (WMD) Civil Support Team (CSTs) – CSTs are Army National Guard WMD response units. There are a total of 32 active CSTs in the nation, organized under the 10 FEMA regions. The mission of the CST is to rapidly deploy to an incident to assess a suspected chemical, biological, radiological, nuclear, or high-yield explosive (CBRNE) incident in support of a local IC. Using specialized equipment and protective gear, the CST can verify the exclusion zone, and then send entry teams into the contaminated area or “hot zone” to conduct reconnaissance, survey, detection, and sampling. The

Analytical Laboratory System (ALS) provides onsite analysis of suspected CBRNE agents, and prepares samples for further analysis by state and Federal labs or law enforcement agencies. The Unified Command Suite (UCS) integrates CST radios with local responders, and facilitates wide-bandwidth data “reach-back”. When responding to a domestic support request, the CST will remain under state control unless federalized. Assets include:

- Multi-gas monitors with photoionization detector, oxygen, lower explosive limit (LEL), and toxic vapor sensors.
- Improved Chemical Agent Monitor (ICAM) – point-detection of nerve and blister agents.
- Chemical agent detector and alarm for remote detector of nerve and blister agents.
- M8 Paper and M9 Paper for detection of nerve and blister agents in liquid.
- “Wet chemistry” detection of nerve, blister, and blood agents.
- Portable gas chromatograph/mass spectrometer – identification of over 150,000 volatile organic compounds and most military chemical agent vapors.
- Gamma spectrometer for detection and measurement of alpha, beta, gamma, and x-ray radiation sources.
- Handheld immunoassay tickets for presumptive identification of eight biological agents.
- Geographic information systems (GIS)-based hazard plume modeling.
- Satellite communications (SATCOM) capability – wide-bandwidth for data and voice reach-back; secure-

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capable.

WEBSITE REFERENCES:

Centers for Disease Control and Prevention:
http://emergency.cdc.gov/agent/agentlistchem.asp
http://www.bt.cdc.gov/chemical/factsheets.asp

Federation of American Scientists:
http://www.fas.org/cw/cwtable.htm

US Food and Drug Administration:
http://www.fda.gov/Drugs/EmergencyPreparedness/BioterrorismandDrugPreparedness/ucm063809.htm

CHEMICAL WARFARE AGENT 20-xiiiCHEMICAL WARFARE AGENT INCIDENTS

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CHAPTER 21

ANIMAL EMERGENCY RESPONSE

Animal emergency response issues may be addressed utilizing the National Incident Management System (NIMS) and National Response Framework (NRF). EPA plays a lead role in responding to hazardous materials (hazmat) spills in residential or agricultural settings under Emergency Support Function (ESF) #10. EPA plays a support role in responding to decontamination and disposal issues associated with a Foreign Animal Disease (FAD) outbreak (ESF #11) or avian/pandemic flu (ESF #8). Utilizing the Incident Command System (ICS), these issues may be addressed within the Environmental Unit of the Planning Section or within the Cleaning and Disinfection Group, Decontamination Group, or Waste Management Group of the Operations Section. A Veterinary Hazmat Unit may be utilized in the Operations Section for activities within the hot zone. Awareness of these issues at the beginning of a response is important in establishing an ICS structure where they will be properly addressed and logistically integrated with other response activities.

The animal health community may not understand the authority of emergency response managers such as Federal On-Scene Coordinators (OSCs). In addition, EPA emergency responders may overlook or underestimate the size and complexity of animal care industries and their relevance to communities. It is essential for the animal/agricultural and emergency management communities to work together to deal with animal and public health emergencies. Whether responding in a lead or support role to an incident that is accidental or

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purposeful, responders will benefit from understanding the importance of animal emergency response issues and the resources available to address them. Responders have the capacity to play an important role in uniting the traditional animal health community with the emergency response community.

In the last five years, infectious diseases such as West Nile Virus, porcine epidemic diarrhea, novel influenza viruses, and monkeypox have appeared in North America, and severe acute respiratory syndrome, Burkholderia pseudomallei, Schmallenburg virus, and avian influenza have emerged on a global scale.

Strikingly, 75% of emerging infectious diseases have been identified as zoonotic (transmissible between species) in origin. These trends underscore the importance of animal health in protection of human health and the environment.

This chapter summarizes animal emergency response issues for responders, identifies opportunities within ICS for addressing these issues, and provides contact information for the Emergency Response “tool kit”.

EPA’s role in animal emergency response varies. Primarily EPA will be responding to releases of hazardous materials. The animal emergency response issues that arise vary depending upon the type of contaminant and the location of the release. Resources required to address animal issues may be minimal but the impact may be substantial. In fact, a community may well judge the entire response by how well their animal issues were addressed.

In the urban setting, pets may be considered family

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members and residents may refuse evacuation without them. Temporary animal shelters may be required during an evacuation, provisions may be necessary for pets isolated in a hot zone, and animal retrieval from the hot zone may be required. Another consideration is stray animal populations which may interfere with response operations. Pets may carry contamination to handlers, owners, or responders. Pets may require decontamination in order to be safely handled and removed from the site. Pets may exhibit toxicological signs/symptoms of exposure to a contaminant and require treatment. In some cases, animals may be sentinels of disease. For example, dancing cat disease diagnosed by veterinarians in Minamata, Japan was the first warning of mercury toxicity in the human population. Another sensitive and important consideration is the diagnosis and disposal of animals that may have been killed by exposure to the contaminant.

An agricultural or rural setting presents additional animal issues. Livestock contamination may cause adverse impacts to animal health, resulting in decreased productivity and profit, or human health, resulting in disease or loss of confidence in the food supply. Livestock or wildlife may be contaminated or destroyed and require appropriate decontamination and disposal. A thorough evaluation of contaminant fate and transport both within animals and the environment is necessary to assess risk.

In addition to releases of hazardous materials, EPA may be asked to provide a response support role in other types of emergencies. In responding to biological, radiological, or chemical weapons release, decontamination and disposal may include wildlife, livestock, service (search and rescue canines), or companion animals. Safe and effective

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decontamination agents and systems may be required. The collection, sampling, and disposal of runoff water may be necessary. Lastly, disposal capacity for large numbers of animal carcasses and the technologies available may greatly impact the cost of the response and resulting environmental impacts.

In addition to the Special Teams and other assets identified in Chapter 14 – Hazardous Substances Response, the following resources and phone numbers are also available:

- National Pesticide Information Center (Oregon State University in cooperation with EPA) 1-800-858-7378.
- American Society for the Prevention of Cruelty to Animals (ASPCA) Animal Poison Control Center 1-888-426-4435.
- Veterinary Medical Assistance Teams part of National Disaster Medical Services (NDMS) with Federal Emergency Management Agency/Department of Homeland Security (FEMA/DHS) are available for National deployment.
- Area Emergency Coordinators – part of the United States Department of Agriculture/Animal and Plant Health Inspection Service (USDA/APHIS) Veterinary Services are regional contacts providing veterinary medical and agricultural support.
- United States Geological Survey (USGS) National Wildlife Center in Madison, WI.
- State Veterinary Diagnostic Labs at http://www.aavld.org/aavld-3/accredlabs.js

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CHAPTER 22

GLOSSARY AND ACRONYMS

GLOSSARY

ACCESS CONTROL POINT – The point of entry and exit from control zones at a hazardous substance incident. Regulates access to and from work areas.

AGENCY REPRESENTATIVE – Individual assigned to an incident from an assisting or cooperating agency that has been delegated full authority to make decisions on all matters affecting their agency's participation at the incident.

AREA COMMAND – An organization established (1) to oversee the management of multiple incidents that are each being handled by an Incident Command System organization or (2) to oversee the management of large or multiple incidents to which several Incident Management Teams have been assigned. Area Command has the responsibility to set overall strategy and priorities, allocate critical resources according to priorities, and ensure that incidents are properly managed.

ASSIGNED RESOURCES – Resources checked-in and assigned work tasks on an incident.

ASSIGNMENTS – Tasks given to resources to perform within a given operational period, based upon incident objectives in the Incident Action Plan.
ASSISTANT – Title for staff of the Command Staff

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positions assigned to help the Command Staff person manage their workload.

ASSISTING AGENCY – An agency directly contributing tactical or service resources to another agency.

BASE – The location at which the primary logistics functions are coordinated and administered. (Incident name or other designator will be added to the term "Base.") The Incident Command Post may be collocated with the Base. There is only one Base per incident.

BRANCH – The organizational level having functional/ geographic responsibility for major incident operations. The Branch level is organizationally between Section and Division/Group in the Operations Section and between Section and Units in the Logistics Section.

CACHE – A pre-determined complement of tools, equipment, and/or supplies stored in a designated location, and available for incident use.

CHECK-IN – Process whereby resources first report to incident response. Check-in locations include: Incident Command Post (Resource Unit), Incident Base, Camps, Staging Areas, Helibases, Helispots, and Division/Group Supervisors (for direct line assignments).

CHIEF – The Incident Command System title for individuals responsible for the command of functional Sections: Operations, Planning, Logistics, and Finance/Administration.

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CLEAR TEXT – The use of plain English in radio communications transmission. Neither 10 Codes nor agency-specific codes are used when using Clear Text.

COMMAND – The act of directing, ordering, and/or controlling resources by virtue of explicit legal, agency, or delegated authority. May also refer to an Incident Commander or to the Unified Command.

COMMAND POST – See Incident Command Post.

COMMAND STAFF – The Command Staff consists of the Public Information Officer, Safety Officer, and Liaison Officer, who report directly to an Incident Commander. They may have an assistant or assistants, as needed.

COMPLEX – Two or more individual incidents located in the same general proximity, which are assigned to a single Incident Commander or Unified Command to facilitate management.

CONTROL ZONES – The geographical areas within the control lines set up at a hazardous substance incident. The three zones most commonly used are the Exclusion Zone, Contamination Reduction Zone, and Support Zone.

COOPERATING AGENCY – An agency supplying assistance other than direct tactical or support functions or resources to the incident control effort (e.g., Red Cross, law enforcement agency, telephone company).

CORPORATION FOR NATIONAL AND COMMUNITY SERVICE (CNCS) – A wholly owned US government

corporation which has specific responsibilities as a support agency under the NRF to develop and support an unaffiliated volunteer management program (if implemented) following an oil or hazardous substance pollution incident.

COST SHARING AGREEMENTS – Agreements between agencies or jurisdictions to share designated costs related to incidents. Cost sharing agreements are normally written but may also be verbal between an authorized agency and jurisdictional representatives at the incident.

DEPUTY – A fully qualified individual who, in the absence of a superior, could be delegated the authority to manage a functional operation or perform a specific task. In some cases, a Deputy could act as relief for a superior and, therefore, must be fully qualified in the position. Deputies can be assigned to the Incident Commander, General Staff, and Branch Directors.

DESIGNATED FIELD SUPERVISOR – Direct line supervisor (e.g., Unit Leader, Branch Director, Section Chief). May be asked to provide sign in/sign out sheets to FSC for assigned personnel.

DIRECTOR – Incident Command System title for individuals responsible for supervision of a Branch.

DIVISION – The organizational level having responsibility for operation within a defined geographic area. The Division level is organizationally between the Task Force/Team and the Branch. (See "Group" also.)

EMERGENCY OPERATIONS CENTER (EOC) – The pre-designated physical location at which the coordination of information and resources to support domestic incident management activities normally takes place.

EMERGENCY SUPPORT FUNCTIONS (ESF) – The National Response Framework (NRF) details 14 ESFs in place to coordinate operations during Federal involvement in an incident.

ENVIRONMENTAL CLEARANCE COMMITTEE (ECC) – Independent body of subject matter experts that provide recommendations to the IC/UC on whether or not sampling data supports achievement of site clearance goals.

EXCLUSION ZONE – The area immediately around a spill or release. That area where contamination does or could occur. The innermost of the three zones of a hazardous substance/material incident. Special protection is required for all personnel while in this zone.

FEDERAL ON-SCENE COORDINATOR (OSC) – See On-Scene Coordinator.

GENERAL STAFF – The group of incident management personnel comprised of: Operations Section Chief, Planning Section Chief, Logistics Section Chief, and Finance/Administration Section Chief.

GEOGRAPHIC INFORMATION SYSTEM(S) (GIS) – A GIS is an electronic information system, which provides a geo-referenced database to support management decision making.

GROUP – Groups are established to divide the incident into functional areas of operation. Groups are composed of resources assembled to perform a special function not necessarily within a single geographic division. (See "Division" also.) Groups are located between Branches (when activated) and Resources in the Operations Section.

HAZARDOUS MATERIAL – For the purposes of Emergency Support Function (ESF) #10, hazardous material is a substance or material, including a hazardous substance, that has been determined by the Secretary of Transportation to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce, and which has been so designated (see 49 CFR 171.8). For the purposes of ESF #10 and the Oil and Hazardous Materials Incident Annex, the term is intended to mean hazardous substances, pollutants, and contaminants as defined by the National Oil and Hazardous Substances Pollution Contingency Plan.

HAZARDOUS SUBSTANCE – As defined by the National Oil and Hazardous Substances Pollution Contingency Plan, any substance designated pursuant to section 311(b)(2)(A) of the Clean Water Act; any element, compound, mixture, solution, or substance designated pursuant to section 102 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (but not including any waste the regulation of which under the Solid Waste Disposal Act (42 U.S.C. § 6901 et seq.) has been suspended by act of Congress); any toxic pollutant listed under section 307(a) of the Clean Water

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Act; any hazardous air pollutant listed under section 112 of the Clean Air Act (42 U.S.C. § 7521 et seq.); and any imminently hazardous chemical substance or mixture with respect to which the EPA Administrator has taken action pursuant to section 7 of the Toxic Substances Control Act (15 U.S.C. § 2601 et seq.).

HELIBASE – A location within the general incident area for parking, fueling, maintenance, and loading of helicopters.

INCIDENT ACTION PLAN (IAP) – An oral or written plan containing incident objectives reflecting the overall strategy for managing an incident. It may include the identification of operational resources and assignments. It may also include attachments that provide direction and important information for management of the incident during one or more operational periods.

INCIDENT COMMANDER (IC) – The individual responsible for all incident activities, including the development of strategies and tactics and the ordering and release of resources. The IC has overall authority and responsibility for conducting incident operations and is responsible for the management of all incident operations at the incident site.

INCIDENT COMMAND POST (ICP) – The field location at which the primary tactical-level, on-scene incident command functions are performed. The ICP may be collocated with the incident base or other incident facilities.

INCIDENT COMMAND SYSTEM (ICS) – A standardized on-scene emergency management concept specifically

designed to allow its user(s) to adopt an integrated organizational structure equal to the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries.

INCIDENT MANAGEMENT TEAM (IMT) – The Incident Commander and appropriate Command and General Staff personnel assigned to an incident.

INCIDENT OBJECTIVES – Statements of guidance and direction necessary for the selection of appropriate strategies and the tactical direction of resources. Incident objectives are based on realistic expectations of what can be accomplished when all allocated resources have been effectively deployed. Incident objectives must be achievable and measurable, yet flexible enough to allow for strategic and tactical alternatives. Incident Objectives are developed from higher level objectives (i.e., strategic or management objectives) typically determined by the Agency's senior officials and provided to the IC. The higher level objectives usually stem from statute, Agency policy, and existing plans, and do not often change during the course of the incident response.

- Strategic Objectives – overarching Agency objectives based on policy.
- Management Objectives – general direction and/or priorities provided by management in the impacted regions(s) and relayed to the IC by the RIC.

INCIDENT SITUATION DISPLAY – The Situation Unit is responsible for maintaining a display of status boards, which communicate critical incident information vital to establishing an effective command and control

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environment.

INITIAL RESPONSE – Resources initially committed to an incident.

INTELLIGENCE/INVESTIGATIONS – National security, classified information, or other operational information necessary for incident decision making. Traditionally, this function is located in the Planning Section but may be moved to other parts of the Incident Command System organization based on Command needs.

JOINT FIELD OFFICE (JFO) – A temporary Federal facility established locally to provide a central point for Federal, state, local, and tribal executives with responsibility for incident oversight, direction, and/or assistance to effectively coordinate protection, prevention, preparedness, response, and recovery actions. The JFO will combine the traditional functions of the Joint Operations Center, the Federal Emergency Management Agency Disaster Field Office, and the Joint Information Center within a single Federal facility.

JOINT INFORMATION CENTER (JIC) – A facility established within or near the Incident Command Post where the Public Information Officer and staff can coordinate and provide information on the incident to the public, media, and other agencies.

JOINT OPERATIONS CENTER (JOC) – The JOC is the focal point for all Federal investigative law enforcement activities during a terrorist or potential terrorist incident or any other significant criminal incident, and is managed by

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the Senior Federal Law Enforcement Official. The JOC becomes a component of the Joint Field Office when the National Response Plan is activated.

JURISDICTION – The range or sphere of authority. Public agencies have jurisdiction at an incident related to their legal responsibilities and authority for incident mitigation. Jurisdictional authority at an incident can be political/geographical (e.g., city, county, state or Federal boundary lines) or functional (e.g., police department, health department, etc.). (See Multijurisdictional Incident.)

LEADER – The Incident Command System title for an individual responsible for a Task Force/Strike Team or functional Unit.

LOGISTICS SECTION – The Logistics Section is responsible for providing facilities, services, and materials for the incident.

MANAGERS – Individuals within Incident Command System organizational units that are assigned specific managerial responsibilities (e.g., Staging Area Manager).

MISSION ASSIGNMENT – The vehicle used by the Department of Homeland Security's Emergency Preparedness and Response Directorate, which includes the Federal Emergency Management Agency (DHS/EPR/FEMA) to support Federal operations in a Stafford Act major disaster or emergency declaration. It orders immediate, short-term emergency response assistance when an applicable state or local government is overwhelmed by the event and lacks the capability to perform, or contract for, the necessary work.

MITIGATE – Any action to contain, reduce, or eliminate the harmful effects of a spill or release of a hazardous substance/material.

MULTIAGENCY COORDINATION (MAC) – Is designed to facilitate all levels of government and all disciplines to work together more efficiently and effectively. MACs consist of a combination of elements: personnel, procedures, protocols, business practices and communications integrated into a common system.

MULTIAGENCY INCIDENT – Is an incident where one or more agencies assist a jurisdictional agency or agencies. May be single or Unified Command.

MULTIJURISDICTIONAL INCIDENT – Is an incident requiring action from multiple agencies that each have jurisdiction to manage certain aspects of an incident. In Incident Command System, these incidents will be managed under Unified Command.

NATIONAL RESPONSE CENTER (NRC) – A national communications center for activities related to oil and hazardous substance response actions. The National Response Center, located at Department of Homeland Security/United States Coast Guard Headquarters in Washington, DC, receives and relays notices of oil and hazardous substances releases to the appropriate Federal On-Scene Coordinator.

NATIONAL RESPONSE FRAMEWORK (NRF) – A document that describes the structure and processes

comprising a national approach to domestic incident management designed to integrate the efforts and resources of Federal, state, local, tribal, private-sector, and non-governmental organizations.

NATIONAL RESPONSE SYSTEM (NRS) – Pursuant to the National Oil and Hazardous Substances Pollution Contingency Plan, the NRS is a mechanism for coordinating response actions by all levels of government (40 CFR § 300.21) for oil and hazardous substances spills and releases.

NATIONAL RESPONSE TEAM (NRT) – The NRT, comprised of the 15 Federal agencies with major environmental and public health responsibilities, is the primary vehicle for coordinating Federal agency activities under the National Oil and Hazardous Substances Pollution Contingency Plan. The NRT carries out national planning and response coordination and is the head of a highly organized Federal oil and hazardous substance emergency response network. EPA serves as the NRT Chair, and the Department of Homeland Security/US Coast Guard serves as Vice Chair.

NATIONAL STRIKE FORCE (NSF) – The NSF consists of three strike teams established by the Department of Homeland Security/US Coast Guard on the Pacific, Atlantic, and Gulf coasts. The strike teams can provide advice and technical assistance for oil and hazardous substances removal, communications support, special equipment, and services.

NUCLEAR INCIDENT RESPONSE TEAM (NIRT) –

Created by the Homeland Security Act to provide the Department of Homeland Security with a nuclear/ radiological response capability. When activated, the NIRT consists of specialized Federal response teams drawn from Department of Energy and/or EPA.

OFFICER – The Incident Command System title for personnel responsible for the Command Staff positions of Safety, Liaison, and Public Information.

ON-SCENE COORDINATOR (OSC) – The Federal official pre-designated by EPA to coordinate responses under subpart D of the National Oil and Hazardous Substances Pollution Contingency Plan or the government official designated to coordinate and direct removal actions under subpart E of the National Oil and Hazardous Substances Pollution Contingency Plan. An OSC can also be designated as the Incident Commander.

OPERATIONAL PERIOD – The period of time scheduled for execution of a given set of operation actions as specified in the Incident Action Plan. Operational periods can be various lengths, usually not over 24 hours. The operational period coincides with the completion of one planning "P" cycle (see the Operational Period Planning Cycle in Chapter 4).

OPERATIONS SECTION – This Section is responsible for all operations directly applicable to the primary mission. Directs the preparation of Branch, Division, and/or Unit operational plans, requests or releases resources, makes expedient changes to the Incident Action Plan as necessary, and reports such to the Incident Commander. It includes the Recovery and Protection Branch, Emergency

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Response Branch, Air Operations Branch, and Wildlife Branch.

OUT-OF-SERVICE RESOURCES – Resources assigned to an incident, but they are unable to respond for mechanical, rest, or personnel reasons.

OVERHEAD PERSONNEL – Personnel who are assigned to supervisory positions that includes: Incident Commander, Command Staff, General Staff, Directors, Supervisors, and Unit Leaders.

PERSONAL PROTECTIVE EQUIPMENT (PPE) – That equipment and clothing required to shield or isolate personnel from the chemical, physical, and biological hazards that may be encountered at a hazardous substance/material incident.

POLLUTANT OR CONTAMINANT – As defined in the National Oil and Hazardous Substances Pollution Contingency Plan, includes, but is not limited to, any element, substance, compound, or mixture, including disease-causing agents, which after release into the environment and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will or may reasonably be anticipated to cause death, disease, behavioral abnormalities, cancer, genetic mutation, physiological malfunctions, or physical deformations in such organisms or their offspring.

REGIONAL RESPONSE TEAMS (RRTs) – Regional counterparts to the National Response Team, the RRTs

comprise regional representatives of the Federal agencies on the National Response Team and representatives of each state within the region. The RRTs serve as planning and preparedness bodies before a response, and provide coordination and advice to the Federal On-Scene Coordinator during response actions.

REPORTING LOCATION – Any one of six facilities/locations where incident assigned resources may check-in. The locations are: Incident Command Post, Resource Unit, Base, Staging Area, Helibase, or Division/Group Supervisors (for direct line assignments). Check-in occurs at one location only.

RESOURCES – All personnel and major items of equipment available, or potentially available, for assignment to incident tasks on which status is maintained.

SCRIBE – a software tool developed by the Environmental Response Team (ERT) to assist in the process of managing environmental data. Scribe captures sampling, observational, and monitoring field data. Examples of Scribe field tasks include Soil Sampling, Water Sampling, Air Sampling and Biota Sampling. Scribe can import electronic data including Analytical Lab Result data (EDD) and Sampling Location data such as Global Positioning System (GPS). Scribe supports handheld extensions, Scriblets, to capture and import sampling and monitoring data collected on handheld PDAs.

SENIOR OFFICIAL – EPA senior manager assigned to the Unified Coordination Group in the Joint Field Office (JFO) during a response. The Senior Official is responsible for

coordination between the JFO, the Emergency Support Function #10 desk in the JFO, the Regional Incident Coordinator(s) and Headquarters on issues impacting EPA policy and resources.

SECTION – That organization level having functional responsibility for primary segments of incident operations such as Operations, Planning, Logistics, and Finance/Administration. The Section level is organizationally between Branch and Incident Commander.

SINGLE RESOURCE – Is an individual, a piece of equipment and its personnel complement, or a crew or team of individuals with an identified work supervisor that can be used on an incident.

SMART PROTOCOLS – Special Monitoring of Applied Response Technologies (SMART) is a cooperatively designed monitoring program for in situ burning and dispersants. SMART relies on small, highly mobile teams that collect real-time data using portable, rugged, and easy-to-use instruments during dispersant and in situ burning operations.

SPAN OF CONTROL – A Command and Control term that means how many organizational elements may be directly managed by one person. Span of Control may vary from one to seven, and a ratio of three-to-five reporting elements is recommended.

STAGING AREA – That location where incident personnel and equipment are assigned awaiting tactical assignment.

STAKEHOLDERS – Any person, group, or organization affected by and having a vested interest in the incident and/or the response operation.

STRATEGY– The general plan or direction selected to accomplish incident objectives.

STRIKE TEAM – Are specified combinations of the same kind and type of resources with common communications and a leader.

SUPERVISOR – Incident Command System title for individuals responsible for command of a Division or Group.

TACTICS – Deploying and directing resources during an incident to accomplish the objectives designated by strategy.

TASK FORCE – A group of resources with common communications and a leader assembled for a specific mission.

TECHNICAL SPECIALISTS – Personnel with special skills who can be used anywhere within the Incident Command System organization.

TERRORISM – Any activity that (1) involves an act that (a) is dangerous to human life or potentially destructive of critical infrastructure or key resources and (b) is a violation of the criminal laws of the United States or of any state or other subdivision of the United States; and (2) appears to be intended (a) to intimidate or coerce a civilian population,

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(b) to influence the policy of a government by intimidation or coercion, or (c) to affect the conduct of a government by mass destruction, assassination, or kidnapping.

UNIFIED COMMAND (UC) – An application of Incident Command System used when there is more than one agency with incident jurisdiction or when incidents cross political jurisdictions. Agencies work together through the designated members of the Unified Command to establish their designated Incident Commanders at a single Incident Command Post and to establish a common set of incident objectives and a single Incident Action Plan.

UNIFIED COORDINATION GROUP – Provides strategic direction to the JFO during the response.

UNIT – That organizational element having functional responsibility for a specific incident planning, logistic, or finance/administration activity.

VOLUNTEER – Any individual accepted to perform services by an agency that has authority to accept volunteer services when the individual performs services without promise, expectation, or receipt of compensation for services performed.

WEAPON OF MASS DESTRUCTION (WMD) – As defined in Title 18, U.S.C. § 2332a: (1) any explosive, incendiary, or poison gas, bomb, grenade, rocket having a propellant charge of more than four ounces, or missile having an explosive or incendiary charge of more than one-quarter ounce, or mine or similar device; (2) any weapon that is designed or intended to cause death or serious bodily

injury through the release, dissemination, or impact of toxic or poisonous chemicals or their precursors; (3) any weapon involving a disease organism; or (4) any weapon that is designed to release radiation or radioactivity at a level dangerous to human life.

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ACRONYMS*

AC	Area Command
ACP	Area Contingency Plan
ALARA	As Low as is Reasonably Achievable
ALS	Analytical Laboratory System
AOBD	Air Operations Branch Director
APHIS	Animal and Plant Health Inspection Service
ASO	Assistant Safety Officer
ASPECT	Airborne Spectral Photographic Environmental Collection Technology
ATP	Authorization to Proceed
ATSDR	Agency for Toxic Substances and Disease Registry (HHS)
BOA	Basic Ordering Agreement
BPA	Blanket Purchase Agreement
CB-RRT	Chemical Biological Rapid Response Team (US Army)
CBIRF	Chemical Biological Incident Response Force
CBR	Chemical, Biological, and Radiological
CBRN	Chemical, Biological, Radiological, and Nuclear
CBRN CMAT	Chemical, Biological, Radiological and Nuclear Consequence Management Advisory Team
CBRNE	Chemical, Biological, Radiological, Nuclear, and Explosives
CBRT	Chemical/Biological Response Team (US Army)
CDC	Centers for Disease Control and Prevention (HHS)
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CG	US Coast Guard
CID	Criminal Investigative Division
CISM	Critical Incident Stress Management
CMAT	Consequence Management Advisory Team
COML	Communication Unit Leader

COMPS	Compensation/Claims Unit Leader
COR	Contracting Officer Representative
COST	Cost Unit Leader
CST	Civil Support Team
DD	Division Director
DGS	Decontamination Group Supervisor
DHS	Department of Homeland Security
DMOB	Demobilization Unit Leader
DMTS	Data Management Specialist
DOC	Departmental/Agency Operations Center
DOD	US Department of Defense
DOE	Department of Energy
DOPS	Deputy Operations Section Chief
DPRO	Display Processor
DQO	Data Quality Objectives
DOCL	Documentation Unit Leader
DTRA	Defense Threat Reduction Agency
EBD	Environmental Branch Director
ECBC	US Army's Edgewood Chemical Biological Center
ECC	Environmental Clearance Committee
ECCL	Environmental Clearance Committee Leader
EEHS	Emergency and Environmental Health Services
EMS	Emergency Medical Services
ENVL	Environmental Unit Leader
EOC	Emergency Operations Center
EPA	Environmental Protection Agency
EPHRB	Environmental Public Health Readiness Branch (CDC)
ERLN	Environmental Response Laboratory Network
ERRS	Emergency and Rapid Response Services
ERT	Environmental Response Team
ESA	Endangered Species Act
ESF	Emergency Support Function
FAA	Federal Aviation Administration

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FACC	Field Accountant
FACL	Facilities Unit Leader
FAD	Foreign Animal Disease
FERN	Food Emergency Response Network
FUND	Funds Certifying Official
FBI	Federal Bureau of Investigation
FDUL	Food Unit Leader
FDA	US Food and Drug Administration
FEMA	Federal Emergency Management Agency
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FOBS	Field Observer
FOIA	Freedom of Information Act
FOP	Field Operations Program
FPN	Federal Project Number
FRMAC	Federal Radiological Monitoring and Assessment Center
FSC	Finance/Administration Section Chief
GIS	Geographic Information Systems
GPS	Global Positioning System
GSUL	Ground Support Unit Leader
HASP	Health and Safety Plan
HAZMAT	Hazardous Substance/Material
HCRS	Historical/Cultural Resources Specialist
HDIAC	Homeland Defense and Security Information Analysis Center
HHS	US Department of Health and Human Services
HHW	Household Hazardous Waste
HSPD-5	Homeland Security Presidential Directive No. 5
HSPD-8	Homeland Security Presidential Directive No. 8
HQ	Headquarters
HVAC	Heating, Ventilation, and Air Conditioning
IAG	Interagency Agreement

IAP	Incident Action Plan
IC	Incident Commander
ICAM	Improved Chemical Agent Monitor
ICP	Incident Command Post
ICS	Incident Command System
IIO	Intelligence/Investigations Officer
IMAAC	Interagency Modeling and Atmospheric Assessment Center
IMH	Incident Management Handbook
IMT	Incident Management Team
IND	Improvised Nuclear Device
ISB	In Situ Burning
JFO	Joint Field Office
JIC	Joint Information Center
JOC	Joint Operations Center
JTTF	Joint Terrorism Task Force
LNO	Liaison Officer
LRN	Laboratory Response Network (HHS)
LSC	Logistics Section Chief
MA	Mission Assignment
MEDL	Medical Unit Leader
MOU	Memorandum of Understanding
NAR	EPA National Approach to Response
NARAC	National Atmospheric Release Advisory Center
NBC	Nuclear, Biological, and Chemical
NCEH	National Center for Environmental Health (HHS)
NCP	National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR 300)
NHPA	National Historic Preservation Act of 1966
NDMS	National Disaster Medical Services
NIC	National Incident Coordinator
NICT	National Incident Coordination Team
NIMS	National Incident Management System

NNSA	National Nuclear Security Agency
NOAA	National Oceanic and Atmospheric Administration
NOC	National Operations Center
NPFC	National Pollution Funds Center
NPL	National Priorities List
NRC	National Response Center
NRDA	Natural Resource Damage Assessment
NRF	National Response Framework
NRIA	Nuclear/Radiological Incident Annex
NRS	National Response System
NRT	National Response Team
NSFCC	USCG National Strike Force Coordination Center
NWCG	National Wildfire Coordinating Group
OCEFT	Office of Criminal Enforcement, Forensics, and Training
OEM	Office of Emergency Management
OHS	Office of Homeland Security
OPA	Office of Public Affairs
OPHEP	Office of Public Health and Emergency Preparedness (HHS)
OPA	Oil Pollution Act
OPBD	Operations Branch Director
OPS	Operations Section Chief (note: the USCG uses the designation OSC)
OPTM	Operations Task Monitor
ORD	Office of Research and Development
ORIA	Office of Radiation and Indoor Air
OSC	Federal On-Scene Coordinator
OSHA	Occupational Safety and Health Administration
OSLTF	Oil Spill Liability Trust Fund
OSWER	Office of Solid Waste and Emergency Response
PA	Programmatic Agreement
PAG	Protective Action Guide
PCC	Policy Coordinating Executive Committee
PIO	Public Information Officer

POC	Point-of-Contact
PPE	Personal Protective Equipment
PROC	Procurement Unit Leader
PRP	Potentially Responsible Parties
PSC	Planning Section Chief
QA	Quality Assurance
QAC	Quality Assurance Coordinator
QAPP	Quality Assurance Project Plan
QC	Quality Control
RA	Regional Administrator
RCDM	Receiving and Distribution Manager
RCMS	Removal Cost Management System
RCP	Regional Contingency Plan
RDD	Radiological Dispersal Device
REAC/TS	Radiological Assistance Center/Training Site
REOC	Regional Emergency Operations Center
RERT	Radiological Emergency Response Team
RESL	Resource Unit Leader
RIC	Regional Incident Coordinator
RICT	Regional Incident Coordination Team
RP	Responsible Party
RSC	Response Support Corps
RRT	Regional Response Team
RTFL	Radiation Task Force Leader
SATCOM	Satellite Communications
SBCCOM	US Army Soldier Biological Chemical Command
SCAT	Shoreline Cleanup Assessment Team
SCKN	Status/Check-In Recorder
SECM	Security Manager
SEDD	Staged Electronic Data Deliverable
SERT	Secretary's Emergency Response Team (HHS)
SGS	Sampling Group Supervisor
SHPO	State Historic Preservation Office
SIA	Senior Intelligence Advisor
SITL	Situation Unit Leader

SitRep	Situation Report
SMART	Special Monitoring of Applied Response Technologies
SO	Safety Officer (note: the USCG uses the designation SOFR)
SOC	Secretary's Operations Center (HHS)
SOG	Standard Operating Guidance
SOP	Standard Operating Procedure
SPUL	Supply Unit Leader
SRT	Specialized Response Team
SSC	Scientific Support Coordinator
STAM	Staging Area Manager
START	Superfund Technical Assessment and Response Team
STLD	Strike Team Leader
SUBD	Support Branch Director
SVBD	Service Branch Director
TAD	Technical Assistance Document
TEU	US Army's Technical Escort Unit
TFLD	Task Force Leader
TIME	Time Unit Leader
TOPS	Technical Operating Procedures
TWG	Technical Working Group
UC	Unified Command
UCS	Unified Command Suite
USAMRIID	US Army's Medical Research Institute of Infectious Diseases
USCG	United States Coast Guard
USDA	US Department of Agriculture
VOLC	Volunteer Coordinator
WMD	Weapons of Mass Destruction
WWTP	Wastewater Treatment Plant

*Note: these acronyms are for use with the EPA IMH and may not reflect acronyms used in the NRF or NIMS.

To: DeCair, Sara[DeCair.Sara@epa.gov]
From: Perrin, Alan
Sent: Fri 10/2/2015 8:49:31 PM
Subject: RE: Edited drinking water PAG documents

You're gold, you got the one in the FR. It's mentioned twice in the doc, but I think it's OK…

Alan Perrin, Deputy Director
Radiation Protection Division, USEPA
ofc (202) 343-9775 | mbl (202) 279-0376

From: DeCair, Sara
Sent: Friday, October 02, 2015 4:34 PM
To: Perrin, Alan
Subject: Fwd: Edited drinking water PAG documents

Sure enough I was supposed to cut that Fukushima ref. can you do this? His food edits are fine with me. I'm on the dang metro!

Sent from my iPhone

Begin forwarded message:

> **From:** "Grevatt, Peter" <Grevatt.Peter@epa.gov>
> **Date:** October 2, 2015 at 4:30:55 PM EDT
> **To:** "DeCair, Sara" <DeCair.Sara@epa.gov>, "Flynn, Mike" <Flynn.Mike@epa.gov>, "Perrin, Alan" <Perrin.Alan@epa.gov>, "Christ, Lisa" <Christ.Lisa@epa.gov>
> **Cc:** "Veal, Lee" <Veal.Lee@epa.gov>
> **Subject: RE: Edited drinking water PAG documents**
>
> Thanks for your quick work on this. Please see the few additional edits I have suggested to the EPA-FDA section for clarity and let me know whether these raise any concerns. Also, I thought that we were going to remove the reference to the 2 tiered guideline for Fukushima but I still see the text there in the document. Am I not remembering that correctly?
>
> **From:** DeCair, Sara
> **Sent:** Friday, October 02, 2015 4:14 PM
> **To:** Flynn, Mike; Grevatt, Peter; Perrin, Alan; Christ, Lisa

Cc: Veal, Lee
Subject: Edited drinking water PAG documents

Mike and Peter,

We took out the sentence below that we heard maybe should be cut -- or maybe should be kept. We think it'd be easier to cut it but if not, it should have a few edits for better clarity. If you want it back in, just let me know. See what you think of the four attachments for sending to OSWER. Thank you!

The FDA food PAG includes the mass of water consumed and EPA's proposed ~~drinking water~~ PAG accounts for drinking water, including ~~water consumed and from~~ water added to foods during preparation.

Sara D. DeCair

http://www.epa.gov/radiation/rert/pags.html

202-343-9108

Room 1416 B in WJC West

To: DeCair, Sara[DeCair.Sara@epa.gov]
Cc: Edwards, Jonathan[Edwards.Jonathan@epa.gov]
From: Perrin, Alan
Sent: Fri 6/26/2015 6:28:06 PM
Subject: RE: Draft Drinking Water PAG proposal in review now

Nice job.

Alan Perrin, Deputy Director
Radiation Protection Division, USEPA
ofc (202) 343-9775 | mbl (202) 279-0376

From: DeCair, Sara
Sent: Friday, June 26, 2015 2:06 PM
To: Mazza, Carl; Ohanian, Edward; Raffaele, Kathleen; Foster, Stiven
Cc: Veal, Lee; Shoaff, John; Perrin, Alan; Hernandez-Quinones, Samuel; Royce, Christopher; Ellis, Jerry
Subject: Draft Drinking Water PAG proposal in review now

Good afternoon Carl,

Thank you for helping us share context for this proposal across offices. See attached our draft Action Memo for a little more detail and please advise if a briefing would be helpful. OGWDW and ORIA are making key staffers available at any time during these internal reviews, in particular myself, Sam Hernandez and Lisa Christ. I'm glad to find a mutually agreeable time if you tell me who should be invited.

OGWDW and ORIA have collaborated on this proposal for short term drinking water guidance for radiological emergencies (a drinking water PAG), which is a gap identified by commenters on the Agency's 2013 revision of the Protective Action Guides and Planning Guidance for Radiological Incidents ("PAG Manual"). The purpose of the PAG Manual is to help federal, state, and local authorities make decisions to protect the public during radiological emergencies. This drinking water proposal is to be announced in the Federal Register for public comments prior to inclusion in the full PAG Manual.

OGC has completed their reviews, and OHS and OSWER (OEM and OSRTI) are currently reviewing the proposal. We briefed Dana Tulis and Monica Gardner the other day, along with key staff in their offices. The interagency group that develops the PAG Manual is supportive of the approach. We're following a similar process path as we used with the 2013 PAG Manual, including reviews by offices involved in radiation protection and emergency response (OSWER, OHS, OW) then facilitation by OP and interagency review by OMB.

Thank you and I hope you have a lovely weekend,

Sara

202-343-9108

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Manual of Protective Action Guides and Protective Actions for Nuclear Incidents

To: DeCair, Sara[DeCair.Sara@epa.gov]
Cc: Griggs, John[Griggs.John@epa.gov]; Poppell, Sam W.[Poppell.Sam@epa.gov]
From: Telofski, Scott
Sent: Tue 12/30/2014 9:42:47 PM
Subject: RE: Revised DW PAG Chapter
Drinking Water PAG - Telofski Comments.pdf

Here ya go. I included only sheets that had a comment on either side of a front and back printout. EMS!

Of particular concern, I was only able to agree with two of the six values they derive for PAGs. It appears some calculations were done using the wrong ingestion rate and possibly other issues, like not combining the Y-90 with the Sr-90 as stated in the text. Could be other issues as well.

I still find it odd that we have a separate 500 mrem limit for water and for food; along with a 2 rem limit overall, that doesn't include either. Not sure this is meeting the idea of ALARA unless we ultimately state that 3 rem total exposure in the first year is the real goal.

Not sure how this fits, but Method 3.1 (DILs) of the FRMAC Assessment Manual has Assumption 3: "DILs are based on average annual dietary intake (kg-wet/yr) of all dietary components (e.g., produce, grains, meats, etc.) <u>including tap water used for drinking</u>." [underline my emphasis] Does this mean we are double counting drinking water if we include it with the food DIL determinations, is the assumption incorrect, or are there other issues with the statement? I'm kinda confused about it.

I think it is dangerously incorrect to state that when deposition has peaked, concentrations decrease at the half-life of the radionuclide. First, there are other removal mechanisms in a moving medium. Second, there could be significant additions that cause concentrations to increase, such as deposited cesium getting into rainfall runoff and then entering a river. Naturally, the time lag, especially for ground water, can be significant as well. Solubility needs to be considered as well.

I'm in tomorrow and the entire week of the 5th if you have questions/comments.

Have a Happy New Year!

Scott

From: DeCair, Sara
Sent: Wednesday, December 24, 2014 10:28 AM
To: Veal, Lee; Perrin, Alan; Nesky, Anthony; Wieder, Jessica; Boyd, Mike; Telofski, Scott
Subject: Revised DW PAG Chapter

Just in time for the holidays, we have a newly edited draft Drinking Water PAG chapter from our friends in OW. I've provided my comments to Lee for her review next week, and we have a meeting with Sam, Lisa and Jerry of OW on Jan. 7th. In case you are in the office, and have time to take a look, I will gladly take any input you have. But don't worry, this will not be our last chance! I will touch base with each of you in the new year to get your thoughts.

S.

From: Hernandez-Quinones, Samuel
Sent: Tuesday, December 23, 2014 4:05 PM
To: DeCair, Sara
Subject: Revised DW PAG Chapter

Hi Sara,

Attached is the revised version of the DW PAG Chapter. As you will see we have incorporated several edits as a result of the direction received from leadership during the recent briefings.

There are a few minor items that we are still working on but this write-up basically contains the main basis for the DW PAG. Any edits can be added at a later time.

I will be out of the office until January 6, 2015, but I will be checking email and voicemail periodically.

Let me know if you have any questions.

Sam

==========

Samuel Hernández Quiñones, P.E.
Environmental Engineer
Environmental Protection Agency
Office of Water
1200 Pennsylvania Ave. NW
Washington, DC 20460
202-564-1735

"USEPA Protecting Human Health and the Environment"

To: DeCair, Sara[DeCair.Sara@epa.gov]
Cc: Boyd, Wesley L.[Boyd.Wesley@epa.gov]; Boyd, Mike[Boyd.Mike@epa.gov]
From: Mena, Rajah
Sent: Thur 1/2/2014 11:30:59 PM
Subject: RE: Back to this again: sensitive subpopulations in implementing PAGs
IAEA Methods Feb2012.pptx
icrp dose comparison chart.pdf
GSG2.pdf
Module 10 Guidance Overview FINAL 092613.pptx

Hi Sara,

Attached is the presentation I think you mean (at least I hope it is). There's not much to it with regard to what the differences are in the ICRP's. However, I have included a few things which may shed some light:

1. "GSG2" – one of the IAEA guidance documents where they implement the newer ICRP guidance.

2. "ICRP Dose Comparison Chart" – a simple crosswalk between each of the most recent guidance documents

3. "Module 10 Guidance Overview FINAL 092613" – a presentation we gave for an international audience on available guidance documents. It goes into how the IAEA documents are used.

I'm looking forward to seeing what you've got for us at the meeting.

Talk to you soon,

RaJah

From: DeCair, Sara [mailto:DeCair.Sara@epa.gov]
Sent: Thursday, January 02, 2014 2:33 PM
To: Mena, Rajah
Cc: Boyd, Wesley L.; Boyd, Mike

Subject: Back to this again: sensitive subpopulations in implementing PAGs

RaJah,

In our 2013 PAG Manual update, we are just hoping to implement the ICRP 60 series recommendations, but I know we'll have to make the leap to 103+ sooner than later. I recall you presented some slides on the residual dose concept and I can't find where I saved them. Would you resend?

Stay tuned, I think we'll talk about this at the Jan. 28-29 FRMAC Assessment WG meeting and then at what will probably be a February symposium specifically on how to recommend assessing emergency doses for age groups and genders, since we didn't make it clear in the revised PAG Manual. We should make it clear in the final version!

Thanks much,

Sara

From: Mena, Rajah [mailto:MenaRM@nv.doe.gov]
Sent: Wednesday, August 28, 2013 7:45 PM
To: DeCair, Sara
Subject: RE: ACTION: Whether and how to use sensitive subpopulations in implementing PAGs

This is timely for sure! We just went through this during the Vibrant Response exercise a couple weeks ago. At Gene J.'s suggestion we ran the adult vs sensitive population DRLs for the state EMA Director to verify that her relocation decision was reasonable. Brian et. al. asked if we REALLY wanted to make a new set of maps given that they only differed by about 1-2%. So, I totally agree (especially now having seen the spreadsheet you forwarded) that we'll do just fine to stick with adults (or the 1 yr for thyroid) as the population of interest.

What I liked about the IAEA's adaptation of 103/138 was the concept of residual dose. It really

gets to the heart of what I'm asked most often: how long do I have until I have to move people (i.e. how much dose have they already gotten vs how much am I going to save them) and how soon can I move them back. PAGs are a great starting place but, I find that I still have to jump through some hurdles to get to THOSE answers. Maybe you've addressed this in the manual?? I'm sorry, I haven't yet read through it. I want to. The mind is willing but the schedule is weak.

RaJah Mena

Senior Scientist

Remote Sensing Lab - Nellis

National Security Technologies, LLC

Contractor to the United States Department of Energy

702-295-8641 Office

702-630-4948 Blackberry

702-794-6057 Pager

MenaRM@nv.doe.gov

From: DeCair, Sara [mailto:DeCair.Sara@epa.gov]
Sent: Wednesday, August 28, 2013 4:18 PM
To: Mena, Rajah
Subject: Fw: ACTION: Whether and how to use sensitive subpopulations in implementing PAGs

RaJah, sorry I didn't include you on the original message I sent earlier. I just remembered that you had spent some time trying to get us to see the ICRP 103 (or 111?) light and so your perspective here would also be helpful. I think it's important to acknowledge states and PAGs users can do what they want, buuuut... We do have a recommendation.
Thoughts? Thanks!
S.

From: DeCair, Sara
Sent: Wednesday, August 28, 2013 6:15:37 PM
To: Brandon, Lou; Milligan, Patricia; Howe, Michael; Ward, Paul; Kraus, Terrence D; Hunt, Brian; Boyd, Mike; Boyd, Wesley L.; Telofski, Scott; Ralston, Lowell; Noska, Michael A

Subject: ACTION: Whether and how to use sensitive subpopulations in implementing PAGs

Hello all;

I am writing to get your opinion on a point we're potentially going to have to explain when we finalize the PAG Manual. The PAGs Subcommittee has discussed this in general terms and we failed to put it in the Manual clearly enough. Some quotes from ICRP 63 and the 1992 PAG Manual have helped form a preliminary conclusion in my mind, and Terry and Brian provided a sensitivity analysis with several age groups and different nuclide mixes (attached, and described below). My goal is to implement ICRP 60 series correctly in the PAGs, since we're not yet ready to move toward ICRP 103…

Do you think this is better discussed on a conference call? Let me know and I will set it up. Those of us who evaluate NPP exercises and provide Advisory Team advice will need to be ready to discuss this topic far before the final PAG Manual will be published, while acknowledging that states have flexibility to implement PAGs their own way.

Quotes from ICRP 63:

See page 3's last sentences: "The derived levels should be calculated as far as possible using realistic rather than excessively conservative parameters and assumptions in the models. Otherwise the protective action will avert less dose than was intended."

Item 27 on page 6, "Justification of an intervention should begin by considering the average avertable individual dose for the whole of the exposed population to which the intervention would be

applied (e.g. sheltering, evacuation, relocation). In some cases the avertable collective dose can be used when the exposed population is not easily identified (e.g. food restrictions, decontamination). If implementation of the protective action is not justified, consideration should be given to whether there are subgroups of the population whose characteristics differ

significantly from the average and for whom the protective action might be justified (e.g. by greater doses to be incurred, or lesser costs)."

Item 66 on page 14, "In justifying and optimising the intervention not only should the exposed population be considered as a whole, but several particular groups for whom costs and benefits will differ require separate consideration. These include pregnant women and small children, hospitalised or other

institutionalised individuals. Separate optimisation is needed for workers engaged in shutting down vital industries or farmers taking care of livestock. Social and psychological costs should be considered when different population groups are treated differently."

My take: Much of ICRP 63 is about how to set PAG levels, which we did decades ago, with a cost-benefit analysis that you can read about in the Appendices of the 1992 Manual. We considered sensitive subpopulations and costs for several scenarios at nuclear power plants. Admittedly, those cost-benefit analyses are outdated, and need to be reevaluated, but first we plan to do a sensitivity analysis to see how far any of the PAG levels would be pushed by more current assumptions. When an emergency manager is implementing PAGs, the page 3 quote above says it all.

Terry and Brian's analysis (see attached) and thoughts, plus screen shots:

Sara,

Please note that these results are somewhat draft because only I reviewed them Eventually we will need to have a more complete peer review. However, I double checked all results and feel pretty confident that they are correct.

I calculated the DRLs for the 6 ICRP age groups and for multiple radionuclide mixtures in the attached Excel spreadsheet. I picked some radionuclide mixtures that are primarily external hazards (e.g., NPP, Uranium-IND, Co-60) and some that are primarily internal hazards (e.g., Weapons Grade Pu).

When the dose from the airborne plume is not included and the Whole Body (Effective Dose) is considered, the adult age group is nearly always the most restrictive (lowest DRL) age group.

When the dose from the airborne plume is included and the Whole Body (Effective Dose) is considered, the adult age group is not always the most restrictive (lowest DRL) age group but, it is pretty close. For example, with the NPP and U-IND mixtures, the Integrated Air Concentration DRL for the 10 yr old is ~13% lower than the adult's DRL and with a Co-60 mixture, the Integrated Air Concentration DRL for the 15 yr old is ~2% lower than the adult's DRL.

When a NPP mixture is considered and the dose from the airborne plume is or is not included and the Thyroid (Equivalent Dose) is considered, then the 1-yr old is most restrictive. This is agreement with the AWG's previous assessment that the 1-yr old is most restrictive for exposure to Iodine and KI administration should be based upon the 1-yr old.

I was actually a bit surprised at the results because the inhalation DCs for the younger age groups can be significantly higher than those of the adult, however, it appears that the much lower breathing rate of the younger ages neutralizes the differences in the inhalation DCs.

Based on this DRAFT analysis I see little value in basing public protection decisions on any age group other than the adult (the exception is that KI decisions should be based on the 1-yr old). The added complexity of assessing each age group is not justified in my opinion. The adult's DRL is within the error margin of the calculation. I think implementing the DRLs for most restrictive age groups may be a bit awkward to implement. For example, the Early Phase public protection decisions may be based upon 10 yr old but, the Intermediate Phase decisions may be based upon a different age group.

In reviewing ICRP 63 I did not see anything that suggests all age groups should be considered and that the public protection decisions should be based upon the most restrictive age group.

I think it will be very helpful if you can add some text to the PAG Manual to state the public protection decisions (except KI administration) should be based upon the adult age group and that this is sufficiently protective because of the conservatism (no sheltering/shielding).

Please take a look at the attached file and let's talk.

Thank you.

Terry

From: Hunt, Brian [mailto:bhunt@sandia.gov]
Sent: Monday, August 26, 2013 3:29 PM
To: DeCair, Sara
Cc: Kraus, Terrence D
Subject: Comparing DRLs for different age groups- for EPA (REVISED)

Sara,

Terry and I have reworked the spreadsheet he sent earlier. I fixed a couple of typos and we have added two more rows for each calculation set.

1 – Most restrictive Age – showing the age group with the most restrictive DRL.

2 – % Difference from using our default age group assumption. (Adult for everything but KI where it is the 1 yr. old.)

For example, this shows that for the Total Dose Early Phase for the NPP Mix, our current assumptions based on the adult would be 13.1% NOT conservative, based on the calculated DRL for the 10 yr. old. You can see that for the examples run, that ~13% is about as large as this error gets, which, compared to some of the assumptions that go into the calculations and all of the errors inherent in collecting/measuring/etc. probably is in the noise…

Give us a call if you have any questions.

Thanks,

Brian

I have also included screen shots from the old and new PAG Manuals showing where the topic

of “age group conservatism” is discussed. Maybe we could put something in the new one that specifically says the calculations are based on the adult, but that the PAGs are established at a level that will provide adequate protection… (similar to the screenshot from the new manual, but applicable to the whole thing…)

********** ATTACHMENT NOT DELIVERED **********

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which may be a computer program. This attached computer program could contain a computer virus which could cause harm to EPA's computers, network, and data. The attachment has been deleted.

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For further information, please contact the EPA Call Center at (866) 411-4EPA (4372). The TDD number is (866) 489-4900.

********** ATTACHMENT NOT DELIVERED **********

Thanks for letting me know what you think, and if I should set up a conference call to talk further -- especially if you want to bring in additional experts on this.

Sara D. DeCair

http://www.epa.gov/radiation/rert/pags.html

202-343-9108

********** ATTACHMENT NOT DELIVERED **********

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For further information, please contact the EPA Call Center at (866) 411-4EPA (4372). The TDD number is (866) 489-4900.

********** ATTACHMENT NOT DELIVERED **********

To: DeCair, Sara[DeCair.Sara@epa.gov]
From: Whiteman, Chad
Sent: Fri 3/8/2013 4:30:36 PM
Subject: RE: EO 12866 Comments on PAG Manual (RIN 2060-AZ19)
EO 12866 comments on PAGs 3-8-2013 edits.docx

Hi Sara,

Couple suggested tweaks. Let me know if these are okay.

Thanks,

Chad

From: DeCair, Sara [mailto:DeCair.Sara@epa.gov]
Sent: Friday, March 08, 2013 10:22 AM
To: Whiteman, Chad
Subject: RE: EO 12866 Comments on PAG Manual (RIN 2060-AZ19)

Chad,

I can call in a few minutes once you've had a chance to open this. Thanks!

Sara

From: Whiteman, Chad [mailto:Chad_S_Whiteman@omb.eop.gov]
Sent: Thursday, March 07, 2013 2:02 PM
To: DeCair, Sara
Subject: FW: EO 12866 Comments on PAG Manual (RIN 2060-AZ19)

Sara,

Attached are suggested revisions to the comment that we spoke about previously. Please let

me know if this is acceptable to EPA.

Thanks,

Chad

To: DeCair, Sara[DeCair.Sara@epa.gov]
From: Whiteman, Chad
Sent: Thur 3/7/2013 7:02:05 PM
Subject: FW: EO 12866 Comments on PAG Manual (RIN 2060-AZ19)
EO 12866 comments on PAGs - 3_7_2013.docx

Sara,

Attached are suggested revisions to the comment that we spoke about previously. Please let me know if this is acceptable to EPA.

Thanks,

Chad

To: Flynn, Mike[Flynn.Mike@epa.gov]
Cc: Perrin, Alan[Perrin.Alan@epa.gov]; Veal, Lee[Veal.Lee@epa.gov]; DeCair, Sara[DeCair.Sara@epa.gov]; Schultheisz, Daniel[Schultheisz.Daniel@epa.gov]
From: Edwards, Jonathan
Sent: Tue 2/19/2013 10:58:23 PM
Subject: FW: EO 12866 Comments on PAG Manual (RIN 2060-AZ19)
PAG Manual EPA redline 11-27-2012 - With OMB-NSS comments 2-19-2013.docx

Mike – Good NEWS! OMB has sent us their consensus edits on the PAGs! We will look at these ASAP and let you know what we think…I'll leave it to you as to when you want to give Gina and Debbie a heads up…. Jon

From: DeCair, Sara
Sent: Tuesday, February 19, 2013 5:44 PM
To: Veal, Lee; Perrin, Alan; Edwards, Jonathan
Subject: Fw: EO 12866 Comments on PAG Manual (RIN 2060-AZ19)

Holy moley! Will read these tonight...

From: Whiteman, Chad
Sent: Tuesday, February 19, 2013 5:27:25 PM
To: DeCair, Sara
Cc: Schwab, Margo
Subject: EO 12866 Comments on PAG Manual (RIN 2060-AZ19)

Hi Sara,

Attached are the consensus edits from OMB and NSS. Before passing back, please accept all edits or flag any edits that you would like to discuss. Once you've accepted the edits, passback any EPA revisions in a track changes document so that we can discuss. Once we have EPA/OMB/NSS consensus, we'll circulate for interagency review so it will be at that time that we'll seek OSHA , FDA, and NRC concurrence on the smaller edits.

Please let me know if you have any questions.

Thanks,

Chad

Chad Whiteman

Policy Analyst | Office of Information and Regulatory Affairs

Office of Management and Budget | Executive Office of the President

202.395.4718 | cwhiteman@omb.eop.gov

To: DeCair, Sara[DeCair.Sara@epa.gov]
Cc: Schwab, Margo[Margo_Schwab@omb.eop.gov]
From: Whiteman, Chad
Sent: Tue 2/19/2013 10:27:25 PM
Subject: EO 12866 Comments on PAG Manual (RIN 2060-AZ19)
PAG Manual EPA redline 11-27-2012 - With OMB-NSS comments 2-19-2013.docx

Hi Sara,

Attached are the consensus edits from OMB and NSS. Before passing back, please accept all edits or flag any edits that you would like to discuss. Once you've accepted the edits, passback any EPA revisions in a track changes document so that we can discuss. Once we have EPA/OMB/NSS consensus, we'll circulate for interagency review so it will be at that time that we'll seek OSHA , FDA, and NRC concurrence on the smaller edits.

Please let me know if you have any questions.

Thanks,

Chad

Chad Whiteman

Policy Analyst | Office of Information and Regulatory Affairs

Office of Management and Budget | Executive Office of the President

202.395.4718 | cwhiteman@omb.eop.gov

To: Hill, Glynis[Hill.Glynis@epa.gov]; Veal, Lee[Veal.Lee@epa.gov]
From: DeCair, Sara
Sent: Tue 11/22/2016 9:18:01 PM
Subject: PAG manual comparisons for your review
Compare 10-18 to 11-7 PAG Manuals.docx
PAG Manual Compare 1104 to 1110_111416ad.docx

Glynis, I've got two docs for you here. I can't run a Word Compare with the PDF final, but the differences between the last round with OMB (10-18) and the very latest Word version I have (11-7) are highlighted in the attached Compare document. I also have included one that our contractor sent me while we were finishing the editorial scrub that we did (11-4 to 11-14). I hope this is what you need. I'm on the clock till 5:30 pm and in the office tomorrow. Best way to reach me is my cell: 202-738-2871. Thanks! -- Sara

---

From: Hill, Glynis
Sent: Tuesday, November 22, 2016 2:21 PM
To: Veal, Lee
Cc: DeCair, Sara
Subject: RE: OMB ready to clear, clean versions attached

Good afternoon Lee:

Is it possible to get a FINAL copy of the PAG manual that highlights the changes that are noted below. The reason I ask is that the pagination is different now that the contractor has made the guidance document so pretty. Thanks in advance.

Glynis Hill – Environmental Scientist | Office of the Administrator | Office of Policy | Office of Regulatory Policy & Management

(202) 564-1139 | 3512V WJC North | Mail Code 1803 | 1200 Pennsylvania Avenue, NW | Washington, DC 20460

From: Veal, Lee
Sent: Wednesday, October 19, 2016 11:11 AM
To: Hill, Glynis <Hill.Glynis@epa.gov>
Cc: Perrin, Alan <Perrin.Alan@epa.gov>; DeCair, Sara <DeCair.Sara@epa.gov>
Subject: OMB ready to clear, clean versions attached

Glynis,

I think that we have the files that you are seeking here as attachments.

1. The Federal Register notice redline/strikeout (RLSO), that includes just a few changes from OMB.

2. The Federal Register notice clean copy that incorporates OMB's changes.

3. The PAG Manual with RLSO reflecting OMB comments noted below (includes NRC, FEMA and OSHA information), Ex. 5 - Deliberative Process

Ex. 5 - Deliberative Process

4. The PAG Manual CLEAN copy, with the aforementioned RLSO and comment fields removed.

Lee

Lee Ann B. Veal

CREM Center Director

Office of Radiation and Indoor Air

Office: 202-343-9448; Cell: 202-617-4322

www.epa.gov/radiation

From: Dorjets, Vlad EOP/OMB Ex. 6 - Personal Privacy
Sent: Tuesday, October 18, 2016 2:48 PM
To: DeCair, Sara
Cc: Hill, Glynis
Subject: RE: Rad PAGs

Sara/Glynis – Please go ahead and upload clean versions of the latest PAG Manual and associated FRN to ROCIS. Please note that the original draft FRN was never uploaded to ROCIS so please load that version as well. Ex. 5 - Deliberative Process

Ex. 5 - Deliberative Process

From: DeCair, Sara [mailto:DeCair.Sara@epa.gov]
Sent: Monday, October 17, 2016 3:19 PM
To: Dorjets, Vlad EOP/OMB Ex. 6 - Personal Privacy
Cc: Hill, Glynis <Hill.Glynis@epa.gov>
Subject: Re: Rad PAGs

That sounds great, thank you so much!

From: Dorjets, Vlad EOP/OMB Ex. 6 - Personal Privacy
Sent: Monday, October 17, 2016 2:49 PM
To: DeCair, Sara
Cc: Hill, Glynis
Subject: RE: Rad PAGs

Ex. 5 - Deliberative Process

From: DeCair, Sara [mailto:DeCair.Sara@epa.gov]
Sent: Thursday, October 13, 2016 12:42 PM
To: Dorjets, Vlad EOP/OMB Ex. 6 - Personal Privacy
Cc: Hill, Glynis <Hill.Glynis@epa.gov>
Subject: RE: Rad PAGs

Here you go, only the new edits/comments are shown in these versions. Of course, let me know if you need anything further or see any problems. Thank you!

From: Dorjets, Vlad EOP/OMB Ex. 6 - Personal Privacy
Sent: Thursday, October 13, 2016 10:49 AM
To: DeCair, Sara <DeCair.Sara@epa.gov>
Cc: Hill, Glynis <Hill.Glynis@epa.gov>
Subject: RE: Rad PAGs

Could you please send me the updated PAG docs as soon as you can? I'd like to wrap those up so that all that is standing in the way of OMB concluding review is the resolution of this issue.

From: Dorjets, Vlad EOP/OMB
Sent: Thursday, October 13, 2016 10:42 AM
To: 'DeCair, Sara' <DeCair.Sara@epa.gov>
Cc: Hill, Glynis <Hill.Glynis@epa.gov>
Subject: FW: Rad PAGs
Importance: High

Ex. 5 - Deliberative Process

From: Hoyes, Jonathan [mailto:jonathan.hoyes@fema.dhs.gov]
Sent: Wednesday, October 12, 2016 9:11 PM
To: Dorjets, Vlad EOP/OMB Ex. 6 - Personal Privacy
Cc: Bibo, David <David.Bibo@fema.dhs.gov>; Barnes, Joshua J. EOP/NSC
Ex. 6 - Personal Privacy Adams, David V. EOP/NSC
Subject: RE: Rad PAGs

Vlad,

Ex. 5 - Deliberative Process

Ex. 5 - Deliberative Process

I look forward to working with you.

Regards,

Regards,

Jonathan

Jonathan M. Hoyes
Director, Technological Hazards Division,
National Preparedness Directorate, FEMA
Room 7SW-2007, 400 C Street, SW, Washington, DC 20024
202-212-2376 (W)
202-507-2294 (C)

To: Perrin, Alan[Perrin.Alan@epa.gov]
From: DeCair, Sara
Sent: Wed 10/19/2016 10:14:11 PM
Subject: Re: DW PAG and Full PAG Manual

Dude, crazy busy! Kathryn is really good at this FRMAC MOM role

---

From: Perrin, Alan
Sent: Wednesday, October 19, 2016 6:12 PM
To: DeCair, Sara
Subject: Re: DW PAG and Full PAG Manual

Good note. I left very similar VM.

Exercise going well? Staying busy?

~~~~~~~~~~~~~
Alan Perrin
dsk 202-343-9775
mbl 202-279-0376

On Oct 19, 2016, at 5:48 PM, DeCair, Sara <DeCair.Sara@epa.gov> wrote:

> Uh oh this doesn't make sense --- Let's hold on a second.
>
> Certainly during the finalization process for the PAG Manual (which we can start now), we plan to finalize the header, the TOC, and the cover as well as update the section numbers for the entire Manual.
>
> I don't think it's necessary to update the Section #s in the DW PAG for it to be reviewed by OMB. I think they're focused on the content. It is our hope that the drinking water guidance will be a new chapter in the full PAG Manual, with corresponding section numbers. OMB asked us to mention it as a placeholder in Table 1-1 and maybe it's best to be ready to either 1) insert it as a chapter or 2) publish as an addendum. Flexibility might require less work now!
>
> Please email if I'm off base, my phone is not working well but I'm working thru the evening. Thank you!
>
> Sara
~~~~~~~~~~~~~

From: Hill, Glynis
Sent: Wednesday, October 19, 2016 5:04 PM
To: Veal, Lee; Christ, Lisa
Cc: Perrin, Alan; DeCair, Sara; Hernandez-Quinones, Samuel; Boyle, Kathryn; Corrales, Mark
Subject: DW PAG and Full PAG Manual

Good evening PAG Team:

I just started reviewing the clean version of the full PAG Manual you sent this morning and two things jumped out immediately:

1. The header still has "Draft Final for Review"

2. The table of contents – section 4.4, page 59 states that the DW PAG will be added as "an addendum"; however the DW PAG that is currently under review in OP is formatted as Section 3.5.2. Upper management is under the impression that it is supposed to be an addendum not a section in the full PAG Manual…Please reformat the DW PAG to reflect the verbiage in section 4.4 on page 59.

Thanks in advance and if I have any additional comments I will forward them to you ASAP.

Glynis Hill – Environmental Scientist | Office of the Administrator | Office of Policy | Office of Regulatory Policy & Management

(202) 564-1139 | 3512V WJC North | Mail Code 1803 | 1200 Pennsylvania Avenue, NW | Washington, DC 20460

From: Veal, Lee
Sent: Wednesday, October 19, 2016 11:11 AM
To: Hill, Glynis <Hill.Glynis@epa.gov>
Cc: Perrin, Alan <Perrin.Alan@epa.gov>; DeCair, Sara <DeCair.Sara@epa.gov>
Subject: OMB ready to clear, clean versions attached

Glynis,

I think that we have the files that you are seeking here as attachments.

1. The Federal Register notice redline/strikeout (RLSO), that includes just a few changes from OMB.

2. The Federal Register notice clean copy that incorporates OMB's changes.

3. The PAG Manual with RLSO reflecting OMB comments noted below (includes NRC, FEMA and OSHA information), shows the removal of the sentence on page 32, footnote changes from OMB/NRC on page 48, OSHA comments starting on page 58.

4. The PAG Manual CLEAN copy, with the aforementioned RLSO and comment fields removed.

Lee

Lee Ann B. Veal

CREM Center Director

Office of Radiation and Indoor Air

Office: 202-343-9448; Cell: 202-617-4322

www.epa.gov/radiation

From: Dorjets, Vlad EOP/OMB <Vladik_Dorjets@omb.eop.gov>
Sent: Tuesday, October 18, 2016 2:48 PM
To: DeCair, Sara
Cc: Hill, Glynis
Subject: RE: Rad PAGs

Sara/Glynis – Please go ahead and upload clean versions of the latest PAG Manual and associated FRN to ROCIS. Please note that the original draft FRN was never uploaded to ROCIS so please load that version as well. In the PAG Manual you upload, please be sure that it reflects the final agreemen between NRC and FEMA (i.e. that the entire sentence with "usually" be removed and that none of the other language be added). Let me know if you have any questions.

From: DeCair, Sara [mailto:DeCair.Sara@epa.gov]
Sent: Monday, October 17, 2016 3:19 PM
To: Dorjets, Vlad EOP/OMB <Vladik_Dorjets@omb.eop.gov>
Cc: Hill, Glynis <Hill.Glynis@epa.gov>
Subject: Re: Rad PAGs

To: Perrin, Alan[Perrin.Alan@epa.gov]
From: DeCair, Sara
Sent: Wed 10/19/2016 9:12:14 PM
Subject: Fw: DW PAG and Full PAG Manual

Alan, I can get this to EnDyna for cleaning up but it will take approx. a week. Sound good? I will start it, at least. S.

From: Hill, Glynis
Sent: Wednesday, October 19, 2016 5:04 PM
To: Veal, Lee; Christ, Lisa
Cc: Perrin, Alan; DeCair, Sara; Hernandez-Quinones, Samuel; Boyle, Kathryn; Corrales, Mark
Subject: DW PAG and Full PAG Manual

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1. The header still has "Draft Final for Review"

2. The table of contents – section 4.4, page 59 states that the DW PAG will be added as "an addendum"; however the DW PAG that is currently under review in OP is formatted as Section 3.5.2. Upper management is under the impression that it is supposed to be an addendum not a section in the full PAG Manual…Please reformat the DW PAG to reflect the verbiage in section 4.4 on page 59.

Thanks in advance and if I have any additional comments I will forward them to you ASAP.

Glynis Hill – Environmental Scientist | Office of the Administrator | Office of Policy | Office of Regulatory Policy & Management

(202) 564-1139 | 3512V WJC North | Mail Code 1803 | 1200 Pennsylvania Avenue, NW | Washington, DC 20460

From: Veal, Lee

Sent: Wednesday, October 19, 2016 11:11 AM
To: Hill, Glynis <Hill.Glynis@epa.gov>
Cc: Perrin, Alan <Perrin.Alan@epa.gov>; DeCair, Sara <DeCair.Sara@epa.gov>
Subject: OMB ready to clear, clean versions attached

Glynis,

I think that we have the files that you are seeking here as attachments.

1. The Federal Register notice redline/strikeout (RLSO), that includes just a few changes from OMB.

2. The Federal Register notice clean copy that incorporates OMB's changes.

3. The PAG Manual with RLSO reflecting OMB comments noted below (includes NRC, FEMA and OSHA information), shows the removal of the sentence on page 32, footnote changes from OMB/NRC on page 48, OSHA comments starting on page 58.

4. The PAG Manual CLEAN copy, with the aforementioned RLSO and comment fields removed.

Lee

Lee Ann B. Veal

CREM Center Director

Office of Radiation and Indoor Air

Office: 202-343-9448; Cell: 202-617-4322

www.epa.gov/radiation

From: Dorjets, Vlad EOP/OMB <Vladik_Dorjets@omb.eop.gov>
Sent: Tuesday, October 18, 2016 2:48 PM
To: DeCair, Sara
Cc: Hill, Glynis
Subject: RE: Rad PAGs

Sara/Glynis – Please go ahead and upload clean versions of the latest PAG Manual and associated FRN to ROCIS. Please note that the original draft FRN was never uploaded to ROCIS so please load that version as well. In the PAG Manual you upload, please be sure that it reflects the final agreemen between NRC and FEMA (i.e. that the entire sentence with "usually" be removed and that none of the other language be added). Let me know if you have any questions.

From: DeCair, Sara [mailto:DeCair.Sara@epa.gov]
Sent: Monday, October 17, 2016 3:19 PM
To: Dorjets, Vlad EOP/OMB <Vladik_Dorjets@omb.eop.gov>
Cc: Hill, Glynis <Hill.Glynis@epa.gov>
Subject: Re: Rad PAGs

To: Perrin, Alan[Perrin.Alan@epa.gov]
From: DeCair, Sara
Sent: Wed 7/27/2016 5:43:53 PM
Subject: Talkies for Water PAG, Internal Q&A
Internal Q&A on Water PAG 9-28-2015 draft final.docx
Talking points for AAs 7-27-2016.docx

Thanks for checking these talking points and editing so they're more useful. I've attached the clean version Q&A too.

Sara D. DeCair

http://www.epa.gov/radiation/rert/pags.html

202-343-9108

Room 1416 B in WJC West

To: Hallam, Christopher[Hallam.Christopher@epa.gov]
From: DeCair, Sara
Sent: Thur 3/31/2016 3:01:55 PM
Subject: RE: Comments re: those Basis sections in PAGs
PAG Manual draft Final 03-08-2016.docx

I have a 3/8 version, attached. The Basis parts are the same, though.

Thx!

From: Hallam, Christopher
Sent: Thursday, March 31, 2016 10:37 AM
To: DeCair, Sara <DeCair.Sara@epa.gov>
Subject: RE: Comments re: those Basis sections in PAGs

I am using the 3/1 version of the new PAG manual as my go-by; is that up to date?

Chris Halusing the 3lam

Health Physicist

Center for Radiological Emergency Management

Office: 202-343-9308

iPhone: Ex. 6 - Personal Privacy

From: DeCair, Sara

Sent: Thursday, March 31, 2016 9:56 AM
To: Hallam, Christopher
Subject: Comments re: those Basis sections in PAGs

Chris,

Ex. 5 - Deliberative Process

but I thought I'd run these past you. They were submitted late, but I want to use every bit of input to improve clarity wherever possible.

Avoidable dose is aimed at not taking too long to make the protective action happen, as in if you hem and haw and 9/10 of the dose has been incurred by then, it doesn't make sense to go ahead and evacuate. The concept is mentioned several times in the Manual but I'm interested in your fresh eyes on it, and the Basis stuff.

Thanks!

Page 49, Section 4.3.3 Fourth Paragraph: The last sentence refers to 5 rem as the upper bound on "CONTROLLABLE" exposure. How does this differ from "avoidable"? This could infer that all radiation from radiation practices which are regulated are included. Such an interpretation is reinforced by the statement that controllable exposures include exposures to accidentally deposited material. Are "accidentally" deposited materials different than those from an RDD or IND? Do they include those from a reactor accident? I am uncertain as to what this means. Perhaps a definition of "controllable exposure" would help.

Page 49, Section 4.3.3 Fifth Paragraph: The paragraph seems to indicate that a relocation PAG of 2 rem projected dose in the first year would be implemented such that a dose of 1.2 rem would be avoided by relocation, assuming that .8 rem would be avoided without relocation as a result of partial occupancy of homes and structures. This appears to be inconsistent with the statement on page 23 in Section 2.4.1 that "Public protection decisions should be based upon the dose that can be avoided (i.e., avoidable dose) by taking some protective action (e.g., evacuation of sheltering)". The use of avoidable dose in decision making needs to be clarified.

Sara D. DeCair

http://www.epa.gov/radiation/rert/pags.html

202-343-9108

Room 1416 B in WJC West