



governmentattic.org

"Rummaging in the government's attic"

Description of document: An Evaluation of Organizational Safety Culture at the U.S. Department of Energy National Nuclear Security Administration (NNSA), survey and final report, 2013

Requested date: 09-February-2019

Release date: 28-August-2019

Posted date: 21-October-2019

Source of document: FOIA/PA Officer
NNSA/Office of the General Counsel
P.O. Box 5400
Albuquerque, NM 87185-5400
Fax: (505) 284-7512
Email: FOIOfficer@nnsa.doe.gov

The governmentattic.org web site ("the site") is a First Amendment free speech web site, and is noncommercial and free to the public. The site and materials made available on the site, such as this file, are for reference only. The governmentattic.org web site and its principals have made every effort to make this information as complete and as accurate as possible, however, there may be mistakes and omissions, both typographical and in content. The governmentattic.org web site and its principals shall have neither liability nor responsibility to any person or entity with respect to any loss or damage caused, or alleged to have been caused, directly or indirectly, by the information provided on the governmentattic.org web site or in this file. The public records published on the site were obtained from government agencies using proper legal channels. Each document is identified as to the source. Any concerns about the contents of the site should be directed to the agency originating the document in question. GovernmentAttic.org is not responsible for the contents of documents published on the website.



Department of Energy
National Nuclear Security Administration
Office of the General Counsel
P. O. Box 5400
Albuquerque, NM 87185



AUG 28 2019

SENT VIA EMAIL

This letter is the final response to your February 09, 2019 Freedom of Information Act (FOIA) request for a copy of the following:

“Requesting a copy of the BRIEFING and ASSESSMENT REPORT provided to NNSA by Human Performance Analysis Corporation (HPA) under contract purchase order DE-NA0002041 and DENA0002566. The subject of the report (approximately 2013 and briefing (Summer 2014) was the Organizational Safety Culture Assessment. The briefing was to the NNSA Administrator under the Office of the Associate Administrator for infrastructure and Operations (NA-00).”

Your request was received in this office on February 12, 2019.

We contacted the National Nuclear Security Administration's Office for Safety, Infrastructure and Operations (NA-50) about your request. NA-50 conducted a search for responsive records and located two (2) responsive documents which are being provided in their entirety.

1. NNSA Presentation Safety Culture Survey 060513
2. NNSA Safety Culture Assessment Final Report

There are no charges to you for processing your FOIA request.

If you have questions, please contact Ms. Donna Del Rio by e-mail at donna.delrio@nnsa.doe.gov or write to the address at the top of the first page. Please reference Control Number FOIA 19-00097-DD.

Sincerely,


Pamela Arias-Ortega
Authorizing Official

An Evaluation of Organizational Safety Culture at the U.S. Department of Energy National Nuclear Security Administration

Presented by:

Sonja B. Haber, Ph.D.

Human Performance Analysis, Corp.

June 5, 2013



Safety Culture Traits

- Leadership Safety Values and Actions
- Problem Identification and Resolution
- Personal Accountability
- Work Processes
- Continuous Learning
- Environment for Raising Concerns
- Effective Safety Communication
- Respectful Work Environment
- Questioning Attitude

Safety Culture Evaluation Scope

- All federal employees that work at the U.S. Department of Energy National Nuclear Security Administration – Headquarters and Field Offices
- On site activities April and May, 2013.
- Survey administered April 10 through 26, 2013 to all DOE NNSA employees at Headquarters and Field Offices.



Multiple Methods for Behavioral Measurement

- Functional Analysis – **Documentation Review**
- Structured Interviews and Focus Groups – **236 Individuals (less than 50% participation rate)**
- Behavioral Anchored Rating Scales (BARS) – **925 BARS**
- Behavioral Observations – **Meeting Observations**
- Organizational and Safety Culture Survey – **53.3% response rate (1258 responses out of 2359 invitation).**

Multiple methods are used to assess each organizational behavior and provide convergent validity to the results.

Approximate Response Rates by DOE NNSA Work Groups

Work Group	# Responses Received	Approximate # of employees*	Approximate Response Rate
NA-1	7	7	100%
NA-00	389	661	58.9%
NA-10	112	145	77.2%
NA-15	118	535	22.1%
NA-20	117	261	44.8%
NA-40	44	88	50.0%
NA-70	87	95	91.7%
NA-80	8	10	80.0%
NA-MB	78	246	31.7%
NA-GC, IM, EA	30	92	33.3%
NA-APM	69	148	46.6%
NA-SH	31	41	75.6%
Prefer not to respond	154	NA	12.2%
TOTAL	1258	2359*	53.3%

* Actual number of employees are tentative and based on the tables provided by NNSA and counts of categorized employees and do not sum to total population number of 2359.

Approximate Response Rates by DOE NNSA Locations

Home Location	Number of Respondents	Actual Number of Employees **	Response Rate
Forrestal	271	542	50.0%
Germantown	48	73	65.8%
Albuquerque	357	884	40.4%
Kansas City	21	42	50.0%
Livermore	70	86	81.4%
Los Alamos	57	125	45.6%
Nevada	70	109	64.2%
NPO Pantex	13	67	19.4%
NPO Y-12	43	70	61.4%
Sandia	26	83	31.3%
Savannah River	28	32	75.7%
Amarillo	33	---	---
Fort Smith	7	---	---
Oak Ridge	20	---	---
Prefer not to respond	180	---	---

** Actual number of employees are tentative and based on the tables provided by NNSA and counts of categorized employees.

Number of Respondents by Employee Category at DOE NNSA

Employee Category	Number of Responses
Administrator/Deputy Administrator/ Associate Administrator	22
HQ Office Director/Deputy Director	68
Other HQ Manager/Team Leader	78
HQ Non-Manager Excepted Service	62
HQ Non-Manager Demo	233
Field Office Manager	13
Other Field Office Manager/Team Leader	74
Field Office Non-Manager Excepted Service	117
Field Office Non-Manager Demo	270
Field Office GS	58
Prefer not to respond	255

Number of Respondents at DOE NNSA by Tenure Category

Years with NNSA/DOE	Number of Responses
Less than 3 Years	116
3 years to 7 years	296
Greater than 7 years	744
Prefer not to respond	96

Leadership Safety Values and Actions

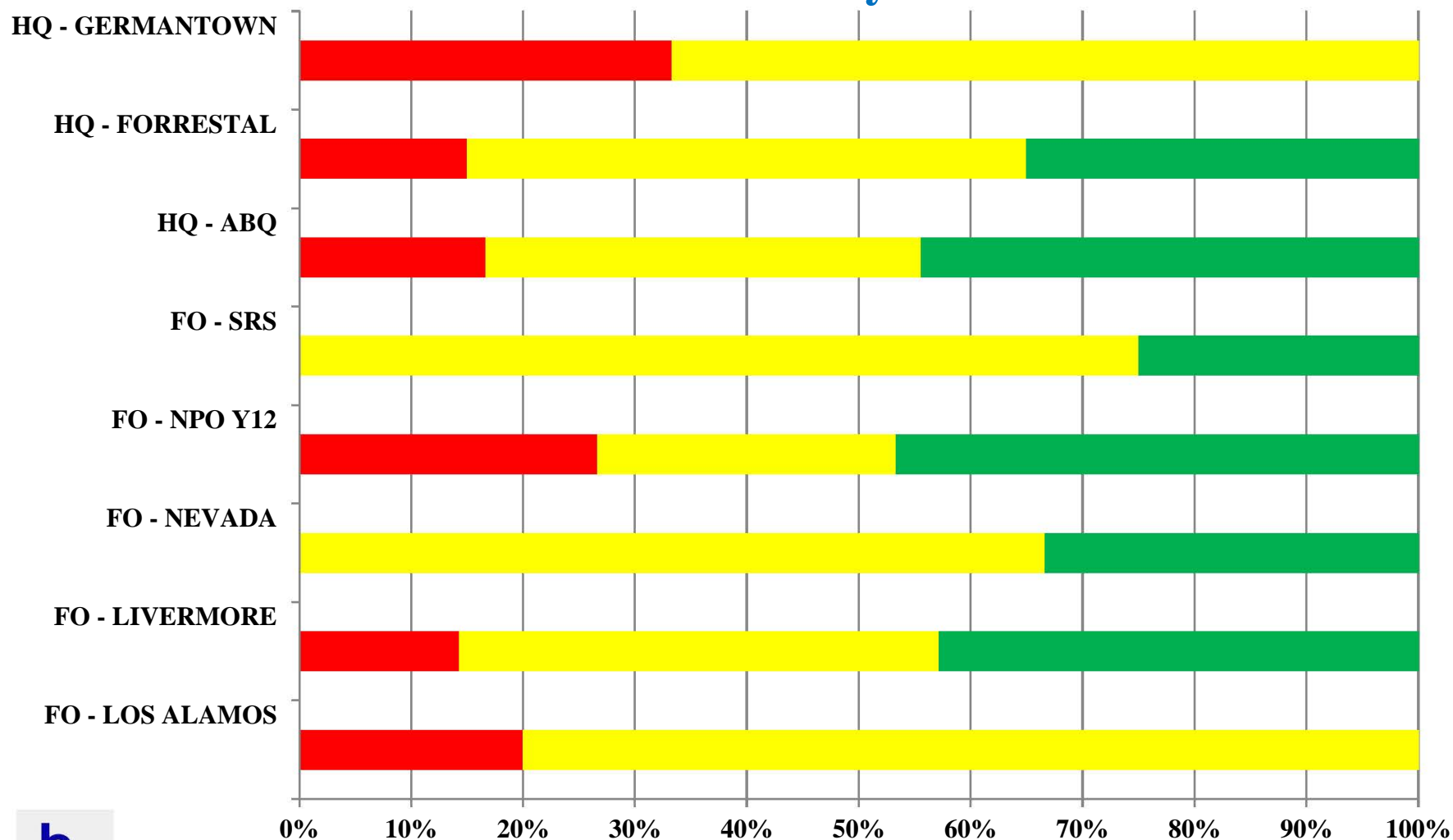
Positive Observations

- Some examples of decisions and behaviors by leadership that indicate a commitment to safety and performance improvement were identified.
- NNSA Employees are committed to the mission and believe that they can help to ensure safety and security for the nation.

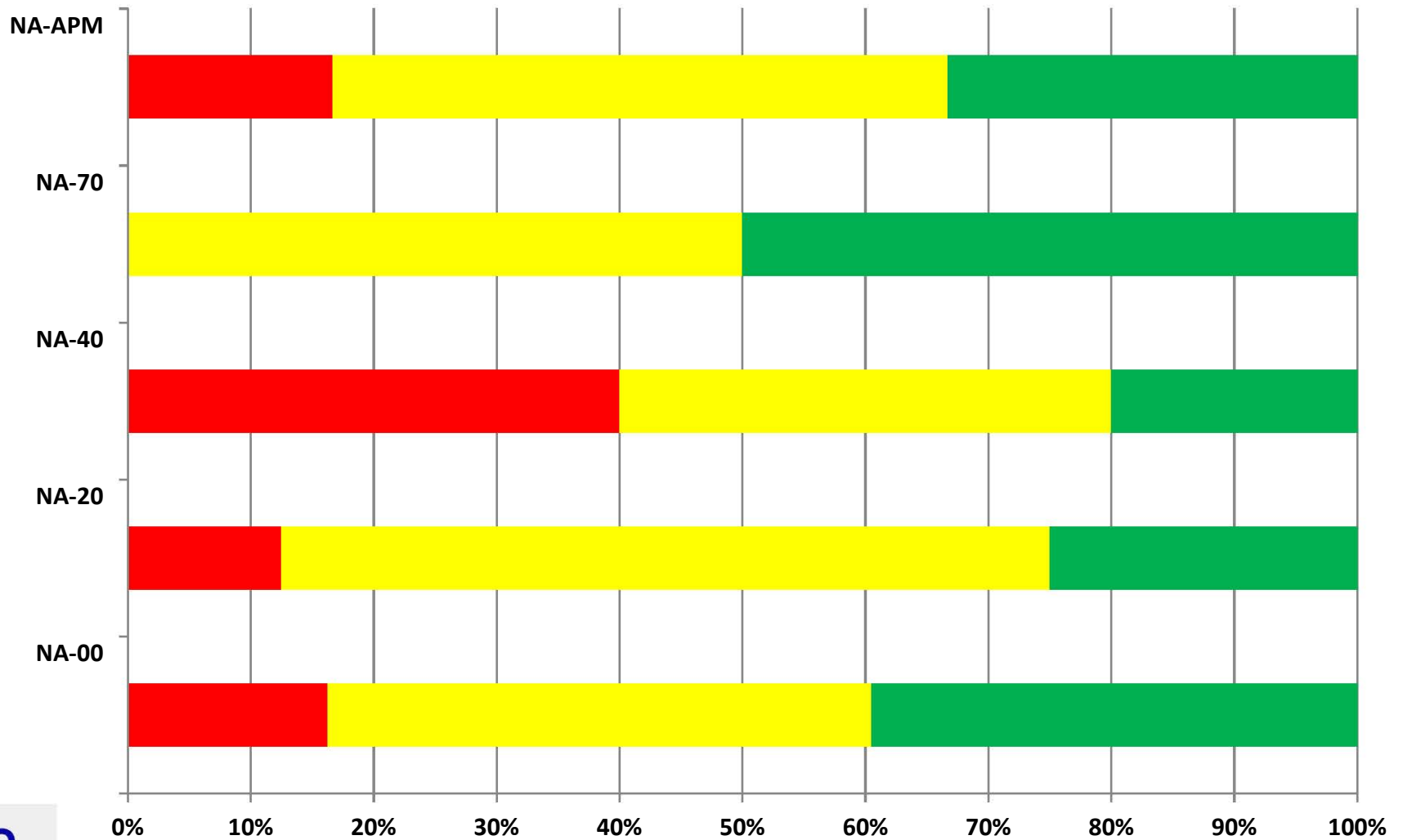
Areas in Need of Attention

- Many interviewees expressed concerns regarding Senior Leadership's commitment and priority to safety.
- Lack of and allocation of resources are perceived to be impacting all aspects of NNSA work.

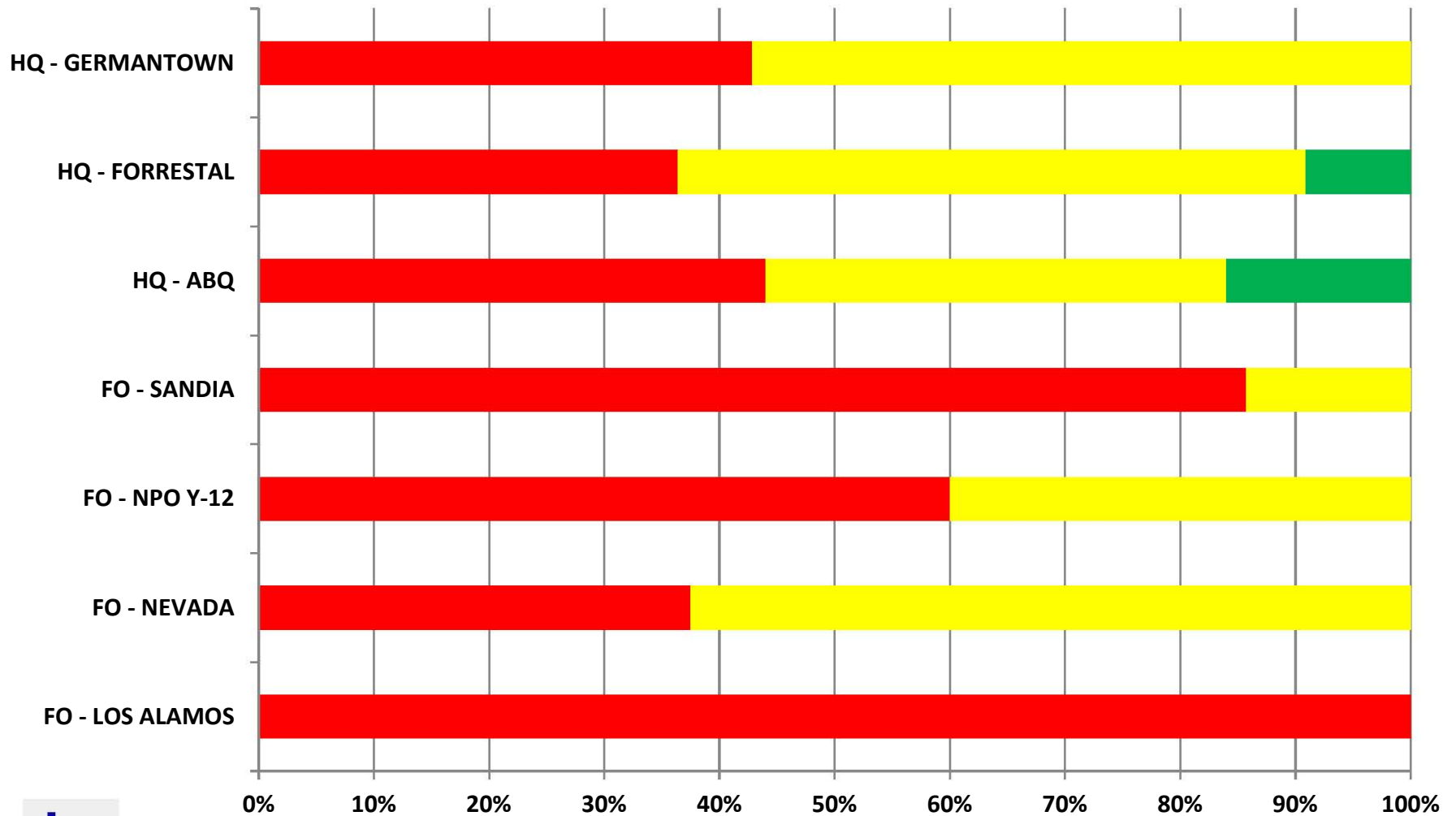
Compare DOE NNSA Locations on Attention to Safety BARS



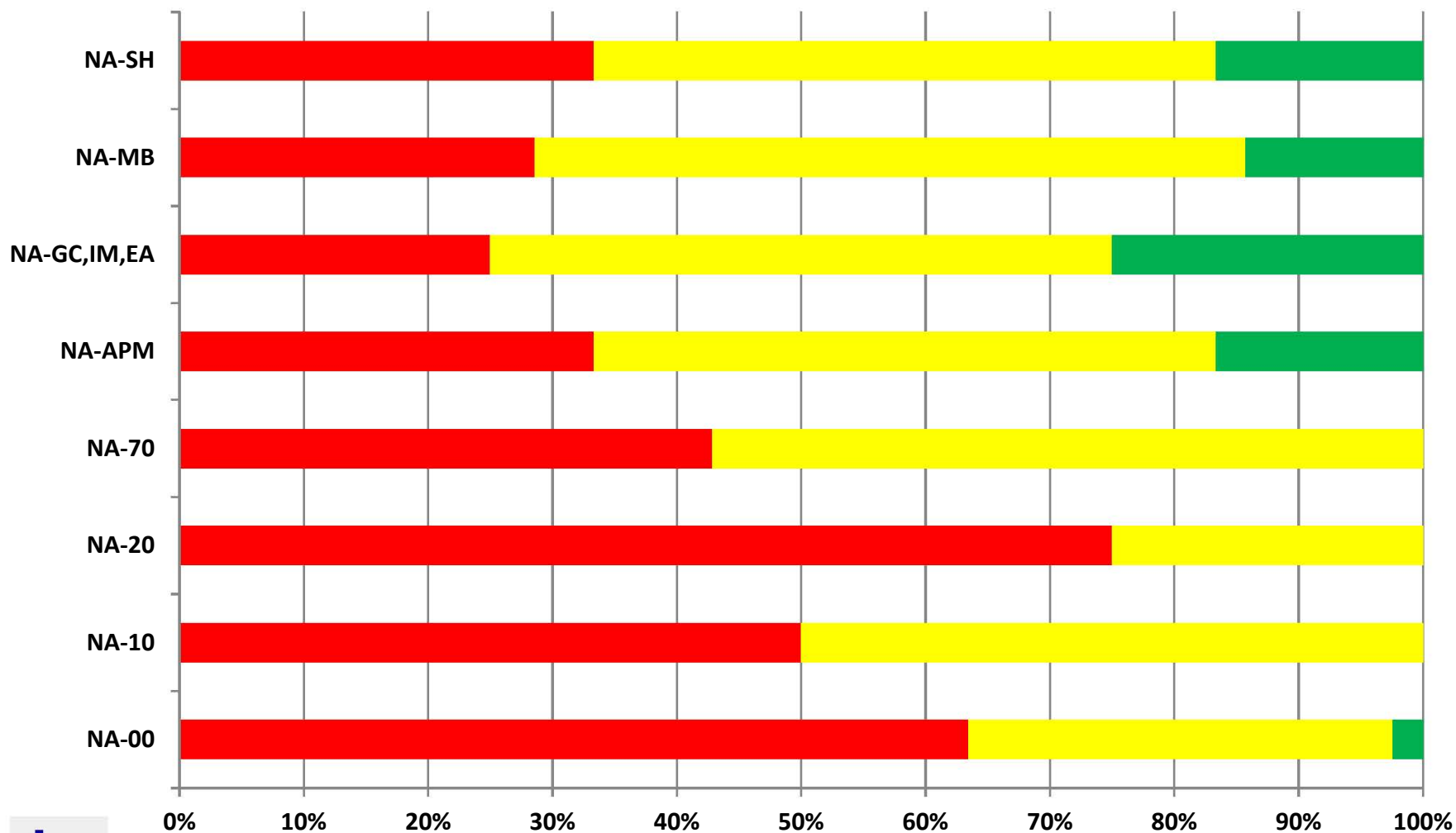
Compare DOE NNSA Work Groups on Attention to Safety BARS



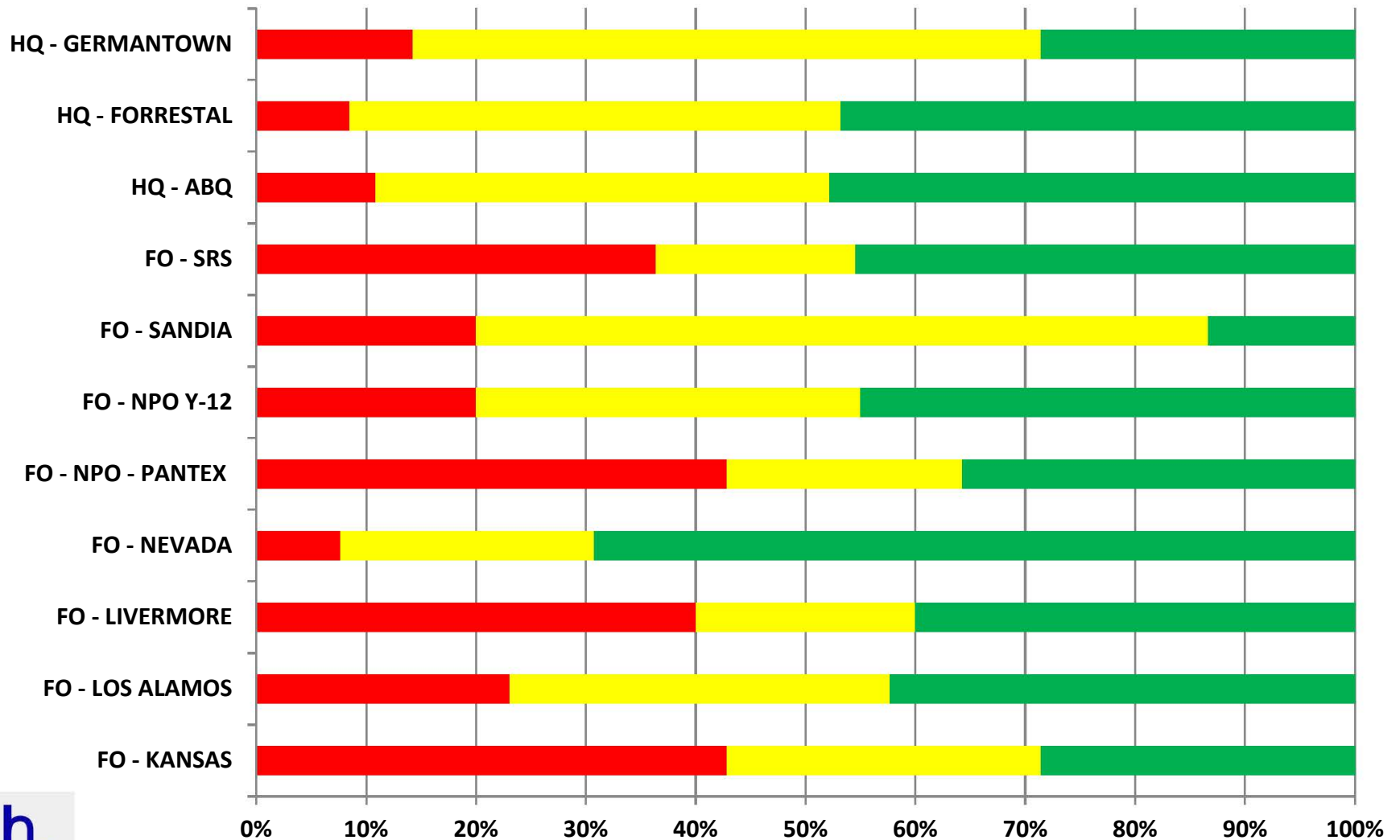
Compare DOE NNSA Locations on Resource Allocation BARS



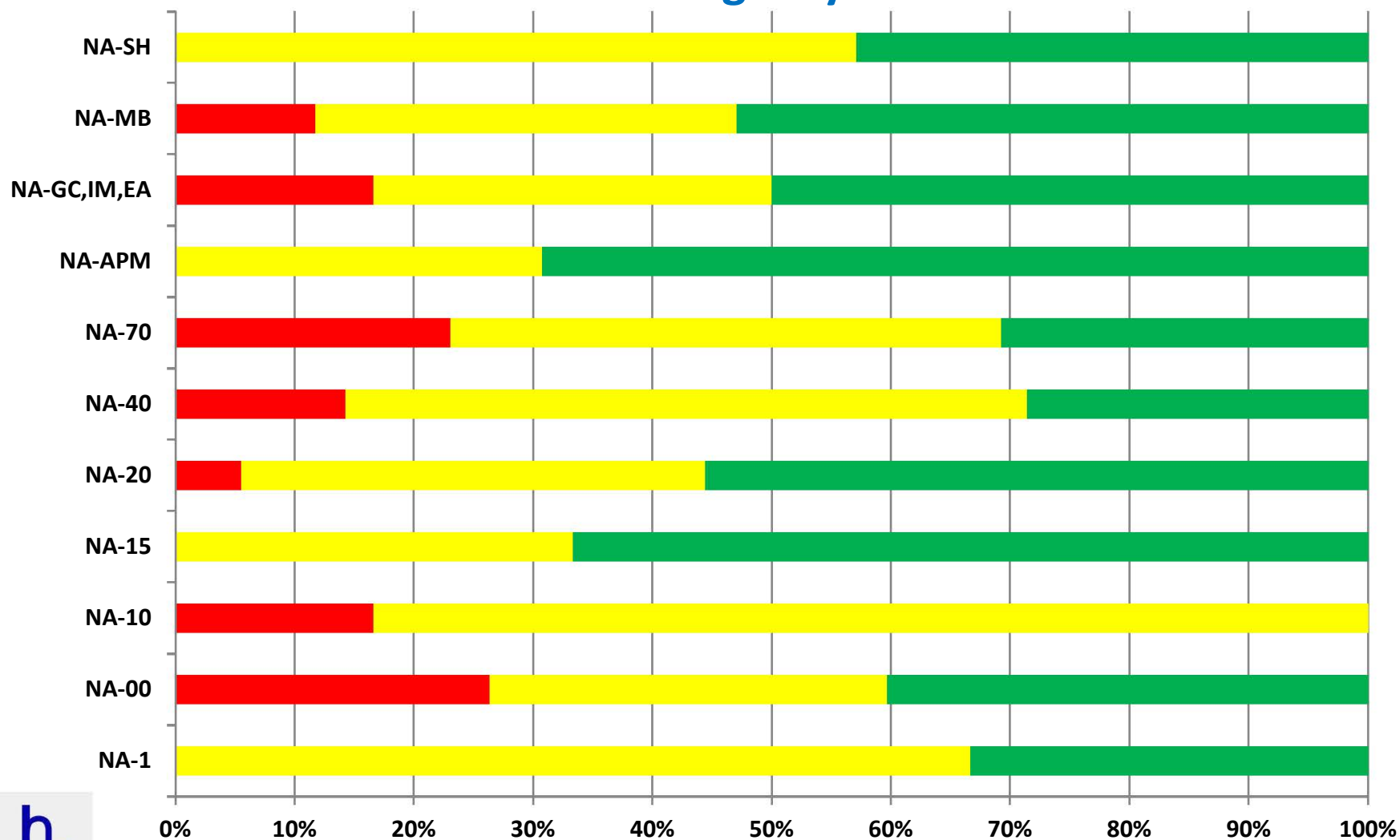
Compare DOE NNSA Work Groups on Resource Allocation BARS



Compare DOE NNSA Locations on Time Urgency BARS



Compare DOE NNSA Work Groups on Time Urgency BARS



Safety Scale Item Rankings for NNSA by Location

Safety Scale Item	FOR	GTN	ABQ	KC	LIV	LA	NEV	PAN	Y-12	SAN	SR	AMA	FS	OR	PNR
Attend to detail	8	7	3	5	1	1	6	6	1	7	4	7	3	5	3
Ask questions whenever necessary	6	3	5	7	7	2	4	7	3	1	8	9	8	9	6
Be aware of others actions	5	4	8	4	10	8	3	5	6	5	9	10	9	8	5
Fix potential problems	3	6	6	6	8	7	7	3	5	2	7	8	10	6	4
Be a reliable team member	2	2	1	1	3	2	2	1	4	4	3	3	6	2	2
Fix small mistakes before grow big	1	1	2	3	2	3	1	2	2	3	1	2	1	3	1
Report mistakes	12	11	12	13	12	12	12	11	12	12	12	11	13	12	12
Challenge directive if it might not work	13	13	13	12	13	13	13	12	13	13	13	13	11	13	13
Learn from mistakes	4	5	4	2	4	6	5	4	8	6	2	4	2	4	8
Report problems	11	12	11	11	11	10	11	10	11	11	10	12	12	11	11
Be prepared to deal with the unexpected	7	8	7	9	6	5	8	8	9	8	6	1	5	1	7
Acknowledge mistakes	10	10	10	10	9	9	10	9	10	10	11	6	7	7	10
Own a problem until it's resolved	9	9	9	8	5	4	9	4	7	9	5	5	4	10	9

Safety Scale Item Rankings for NNSA by Employee Category

[illegible]

Problem Identification and Resolution

Positive Observations

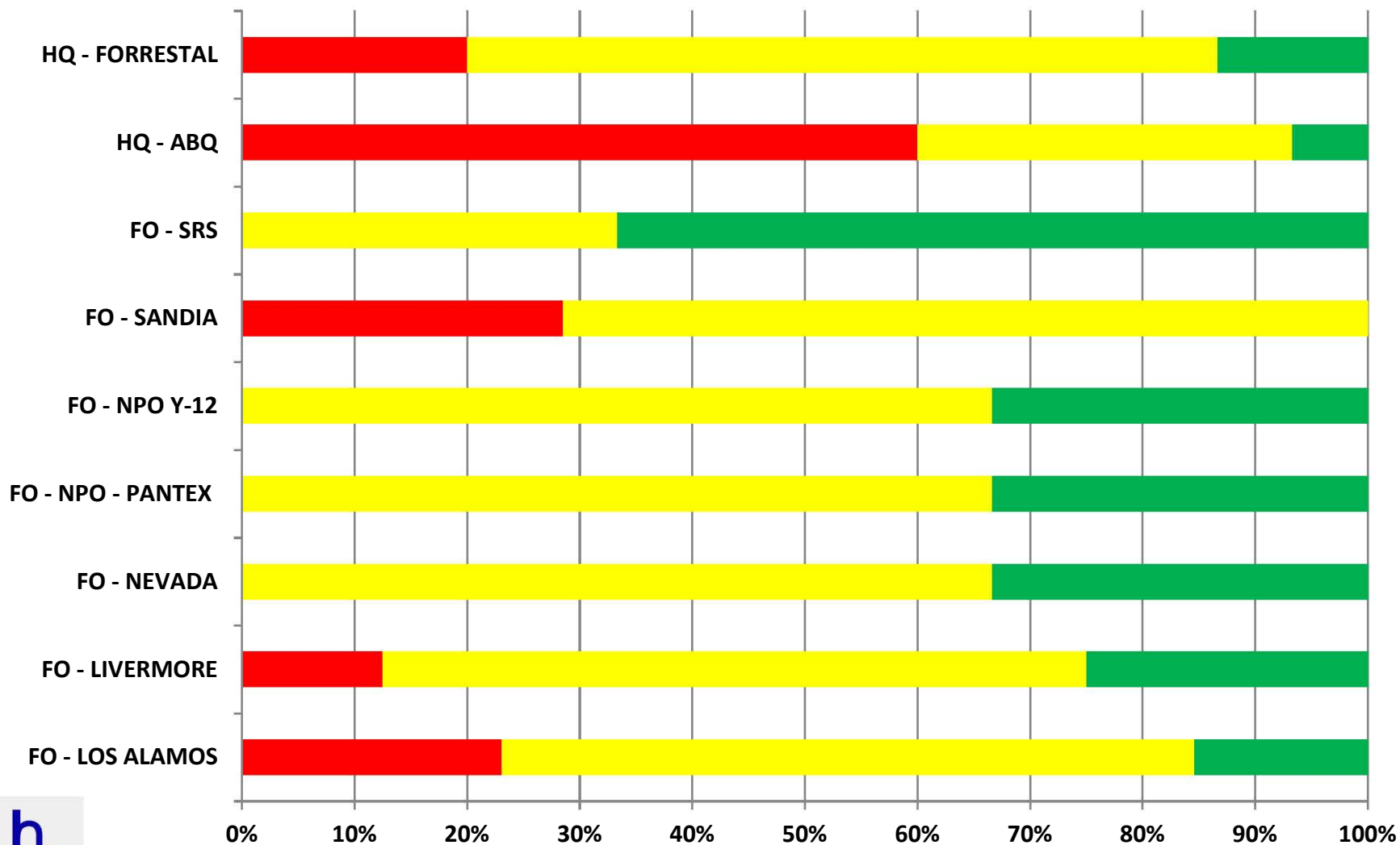
- Multiple mechanisms for identifying problems were described.
- Field Offices have developed their own initiatives to promote problem identification.

Areas in Need of Attention

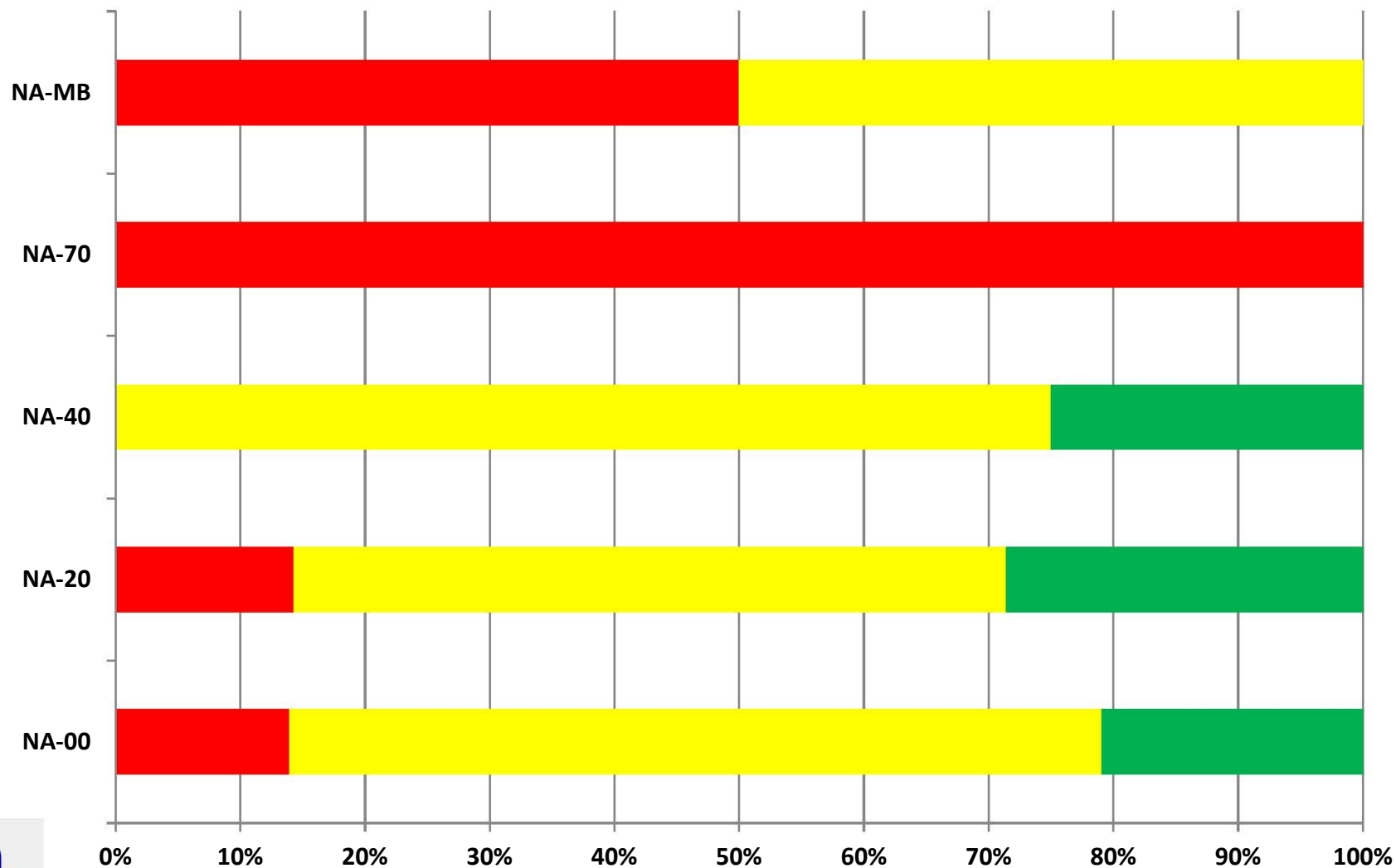
- Issues associated with inhibiting the identification of problems or concerns were identified.
- Perception that NNSA and DOE do not have good standards or metrics to define what a problem actually is.



Compare DOE NNSA Locations on Problem Identification & Resolution BARS



Compare DOE NNSA Work Groups on Problem Identification & Resolution BARS



Personal Accountability

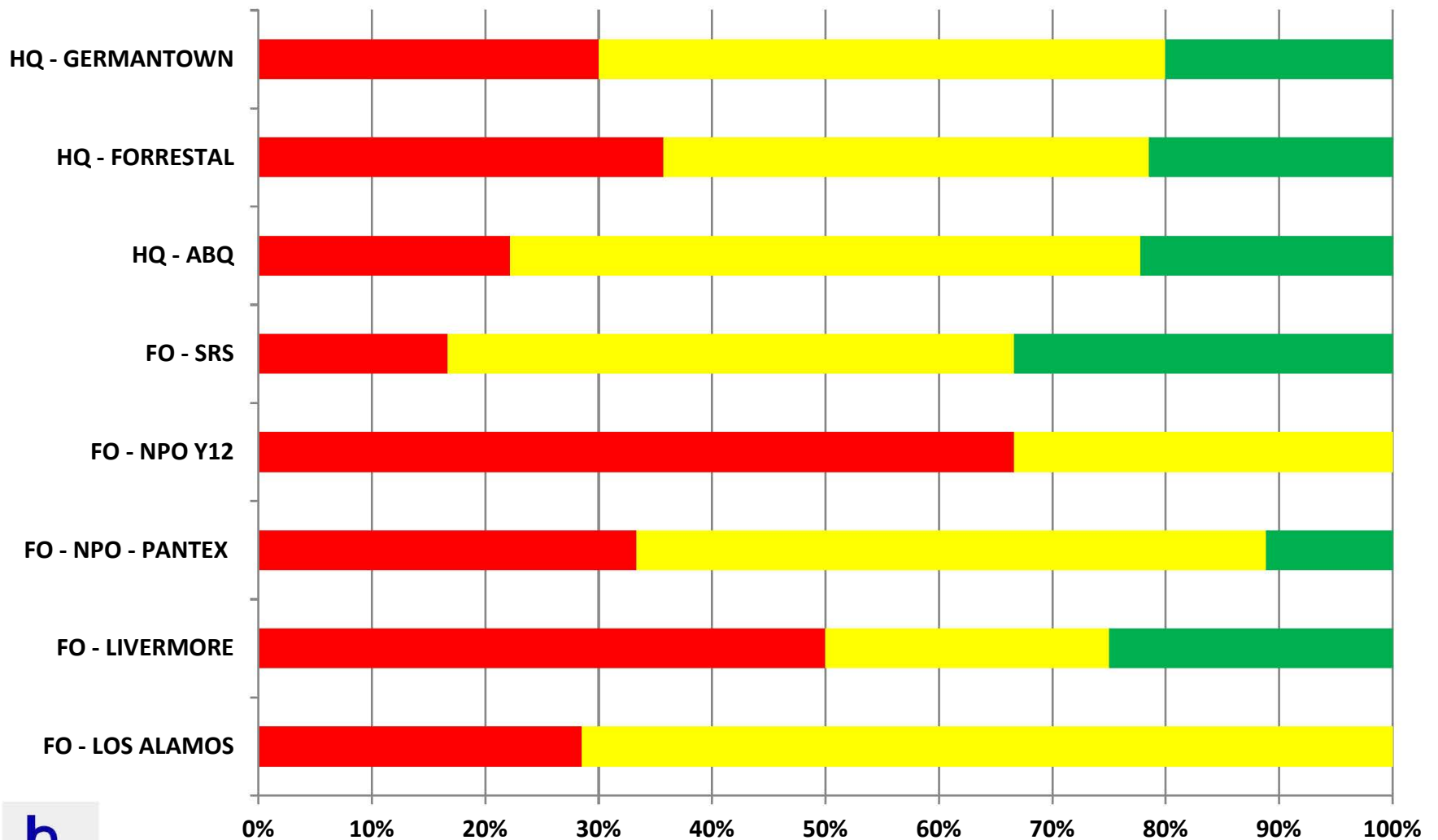
Positive Observations

- Strong and pervasive sense of ownership to the mission and to produce quality products.

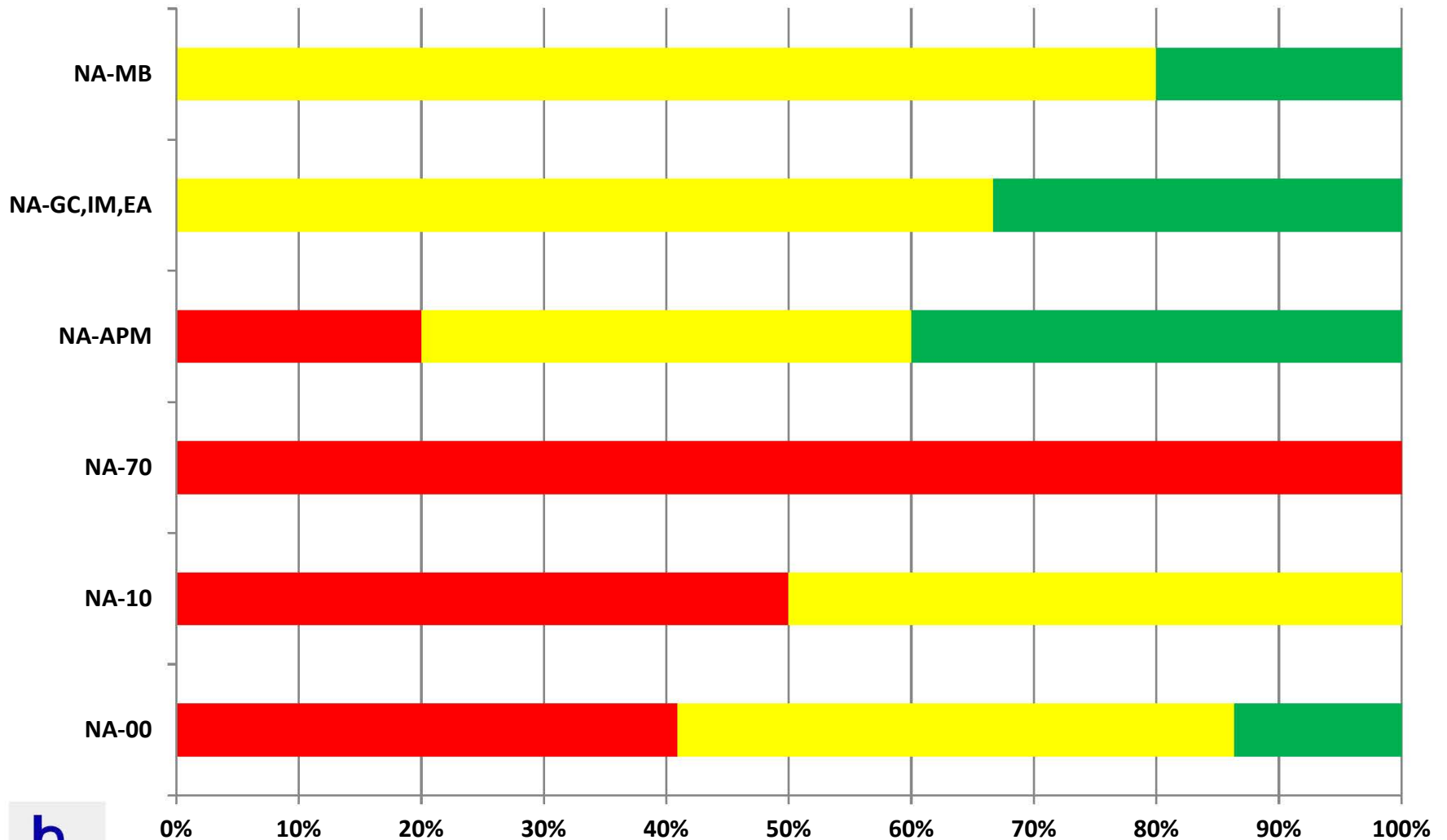
Areas in Need of Attention

- Reorganization within NNSA has created a lot of confusion in the roles and responsibilities of the various offices.
- Accountability is perceived by many interviewees to be an issue at NNSA.

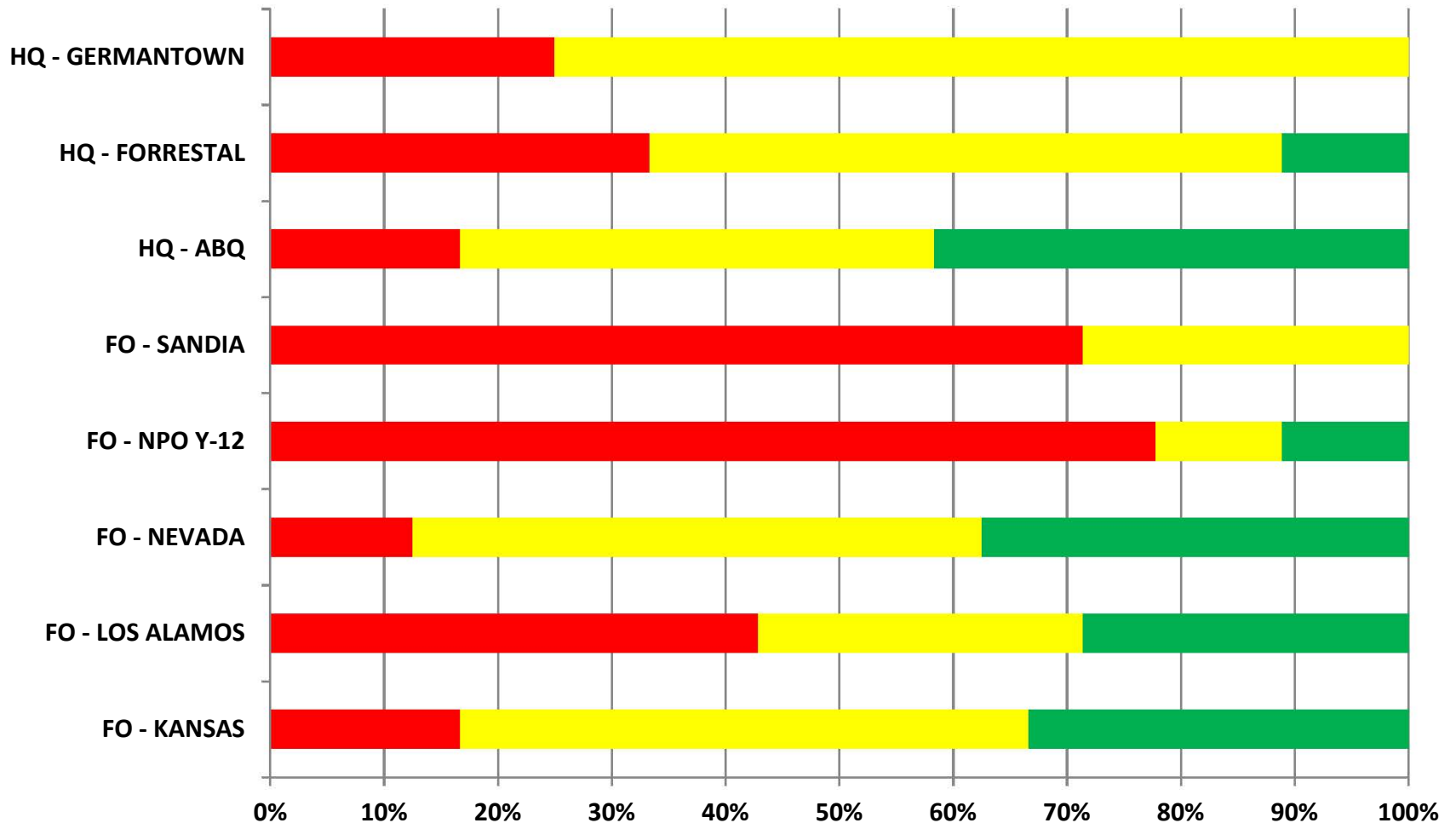
Compare DOE NNSA Locations on Performance Quality BARS



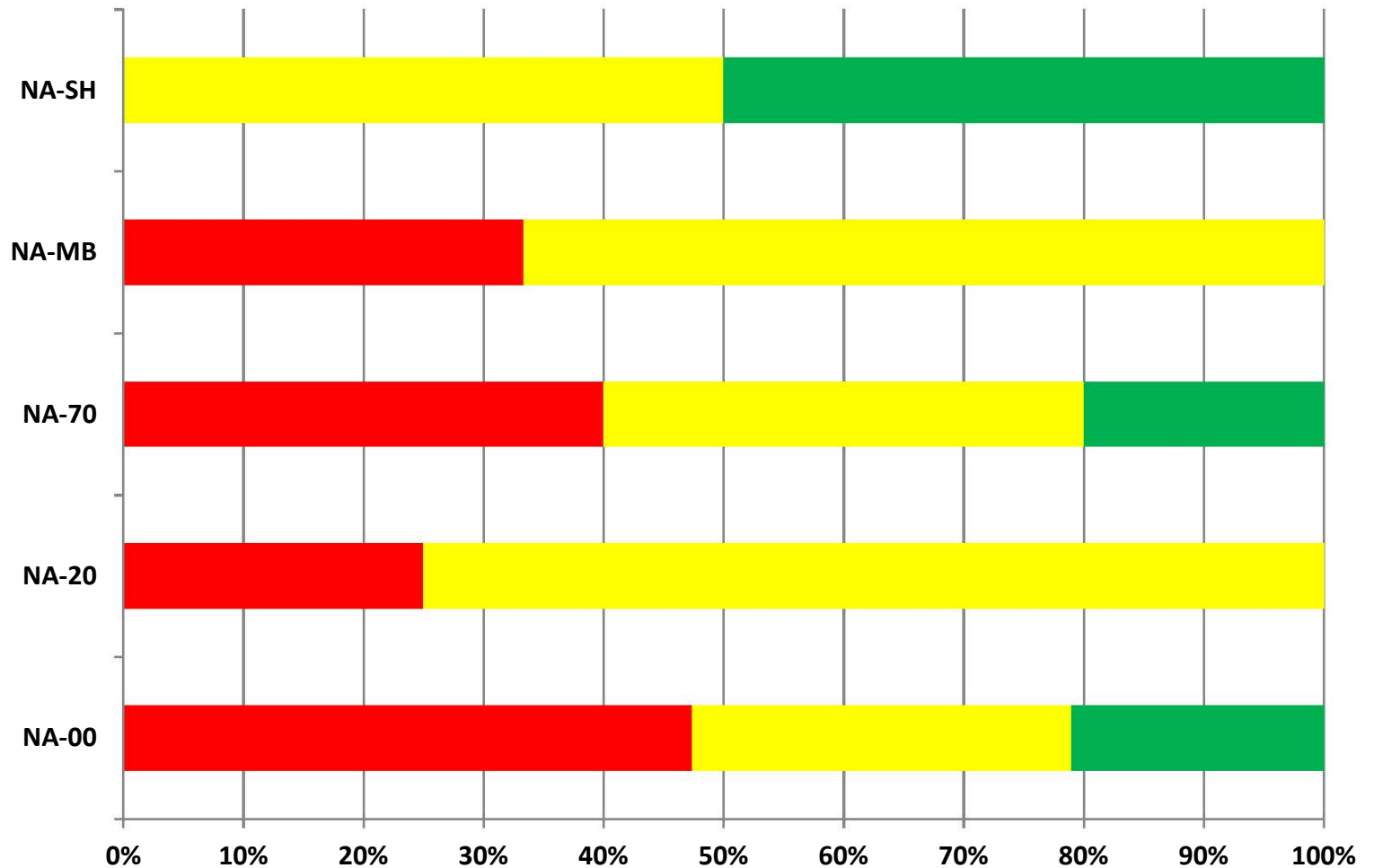
Compare DOE NNSA Work Groups on Performance Quality BARS



Compare DOE NNSA Locations on Roles & Responsibilities BARS



Compare DOE NNSA Work Groups on Roles & Responsibilities BARS



Work Processes

Positive Observations

- Some interviewees perceive that coordination of work and communication is better in NNSA than other parts of DOE and that the organization is working on improving it.
- The reorganization is designed to promote and facilitate a more integrated and standardized approach to work.

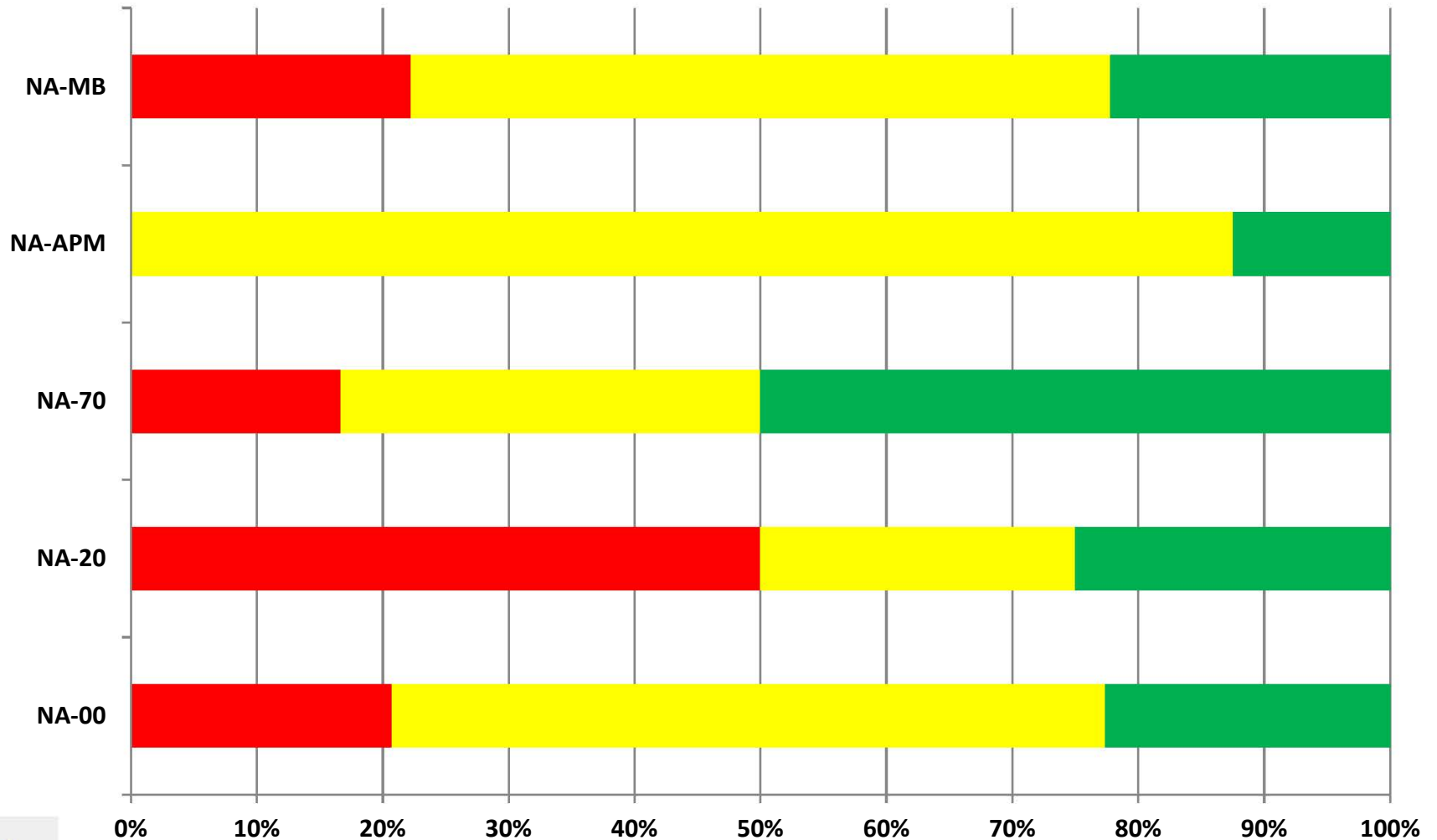
Areas in Need of Attention

- Several barriers within NNSA to getting work done were described by interviewees.
- There is a lack of formalization to control work and outline roles and responsibilities across NNSA.

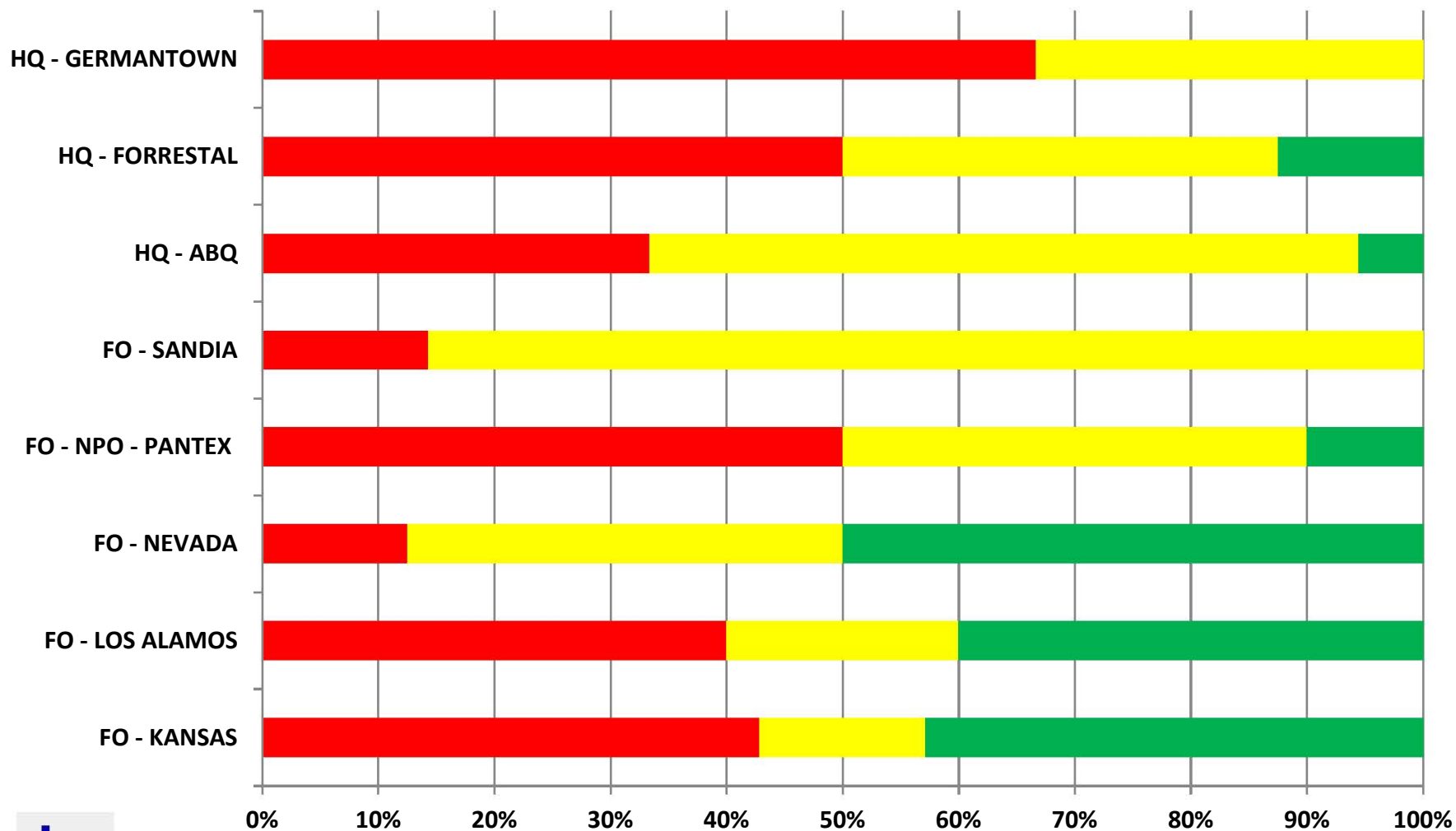
Compare DOE NNSA Locations on Coordination of Work BARS



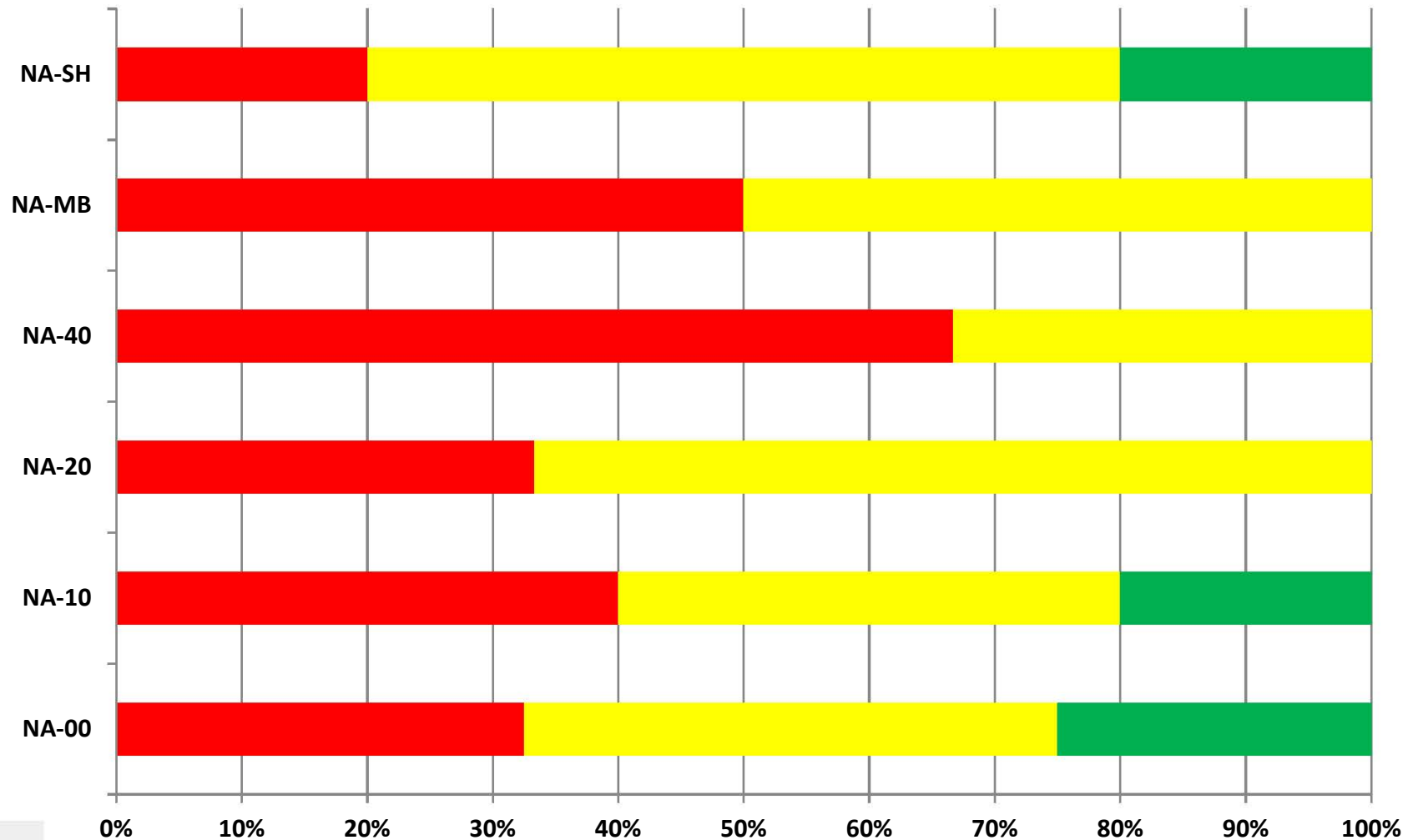
Compare DOE NNSA Work Groups on Coordination of Work BARS



Compare DOE NNSA Locations on Formalization BARS



Compare DOE NNSA Work Groups on Formalization BARS



Continuous Learning

Positive Observations

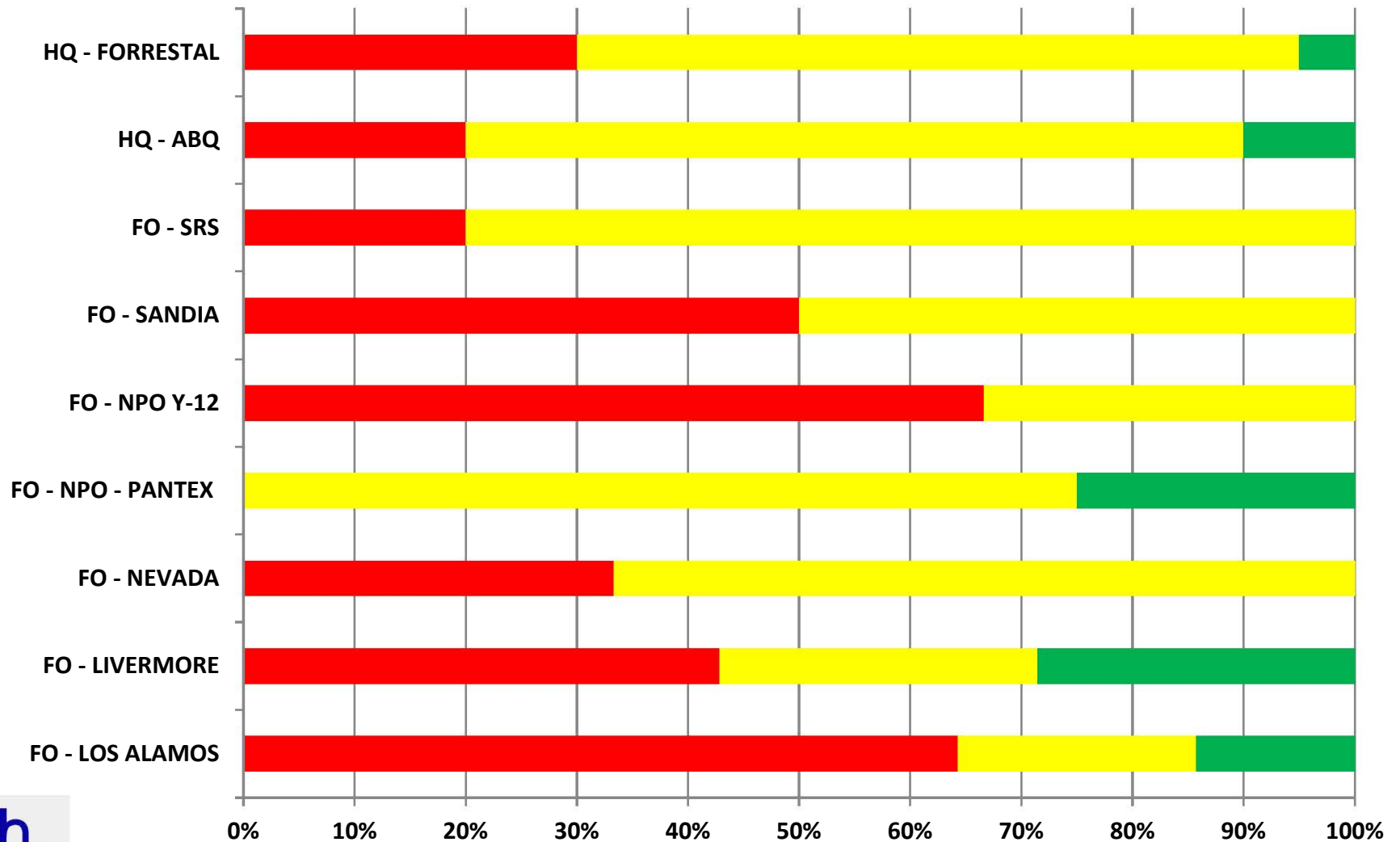
- Some efforts at organizational learning were described by interviewees.
- Interviewees indicated that some of the field offices have attempted to reinforce reporting so that lessons learned can be capture.

Areas in Need of Attention

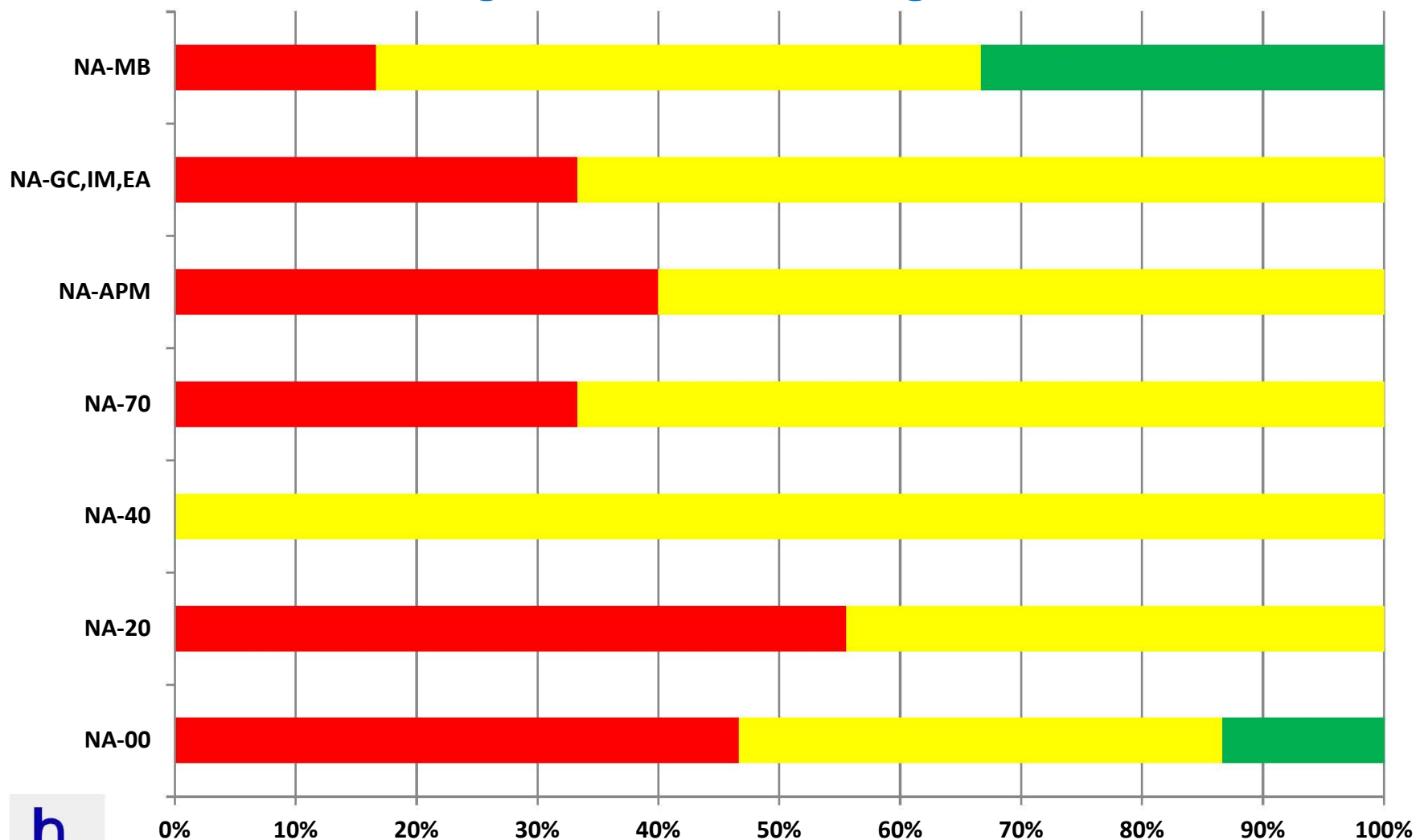
- Most interviewees perceive that NNSA does not do a good job of organizational learning because there is no formalized process to share lessons learned.
- Information sharing is driven by individuals, not by process.



Compare DOE NNSA Locations on Organizational Learning BARS



Compare DOE NNSA Work Groups on Organizational Learning BARS



Environment for Raising Concerns

Positive Observations

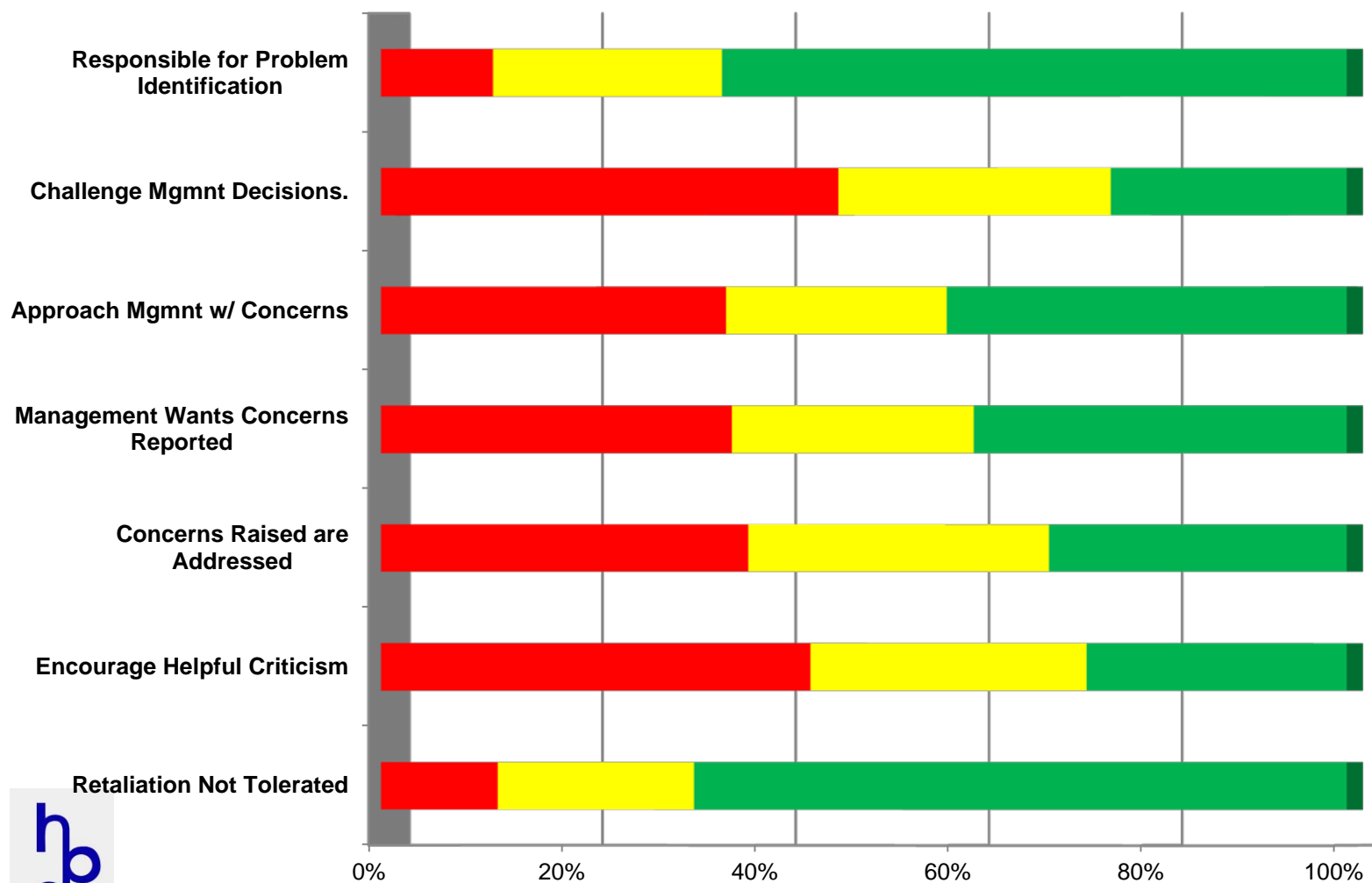
- Interviewees indicated that there are multiple mechanisms available to identify concerns.

Areas in Need of Attention

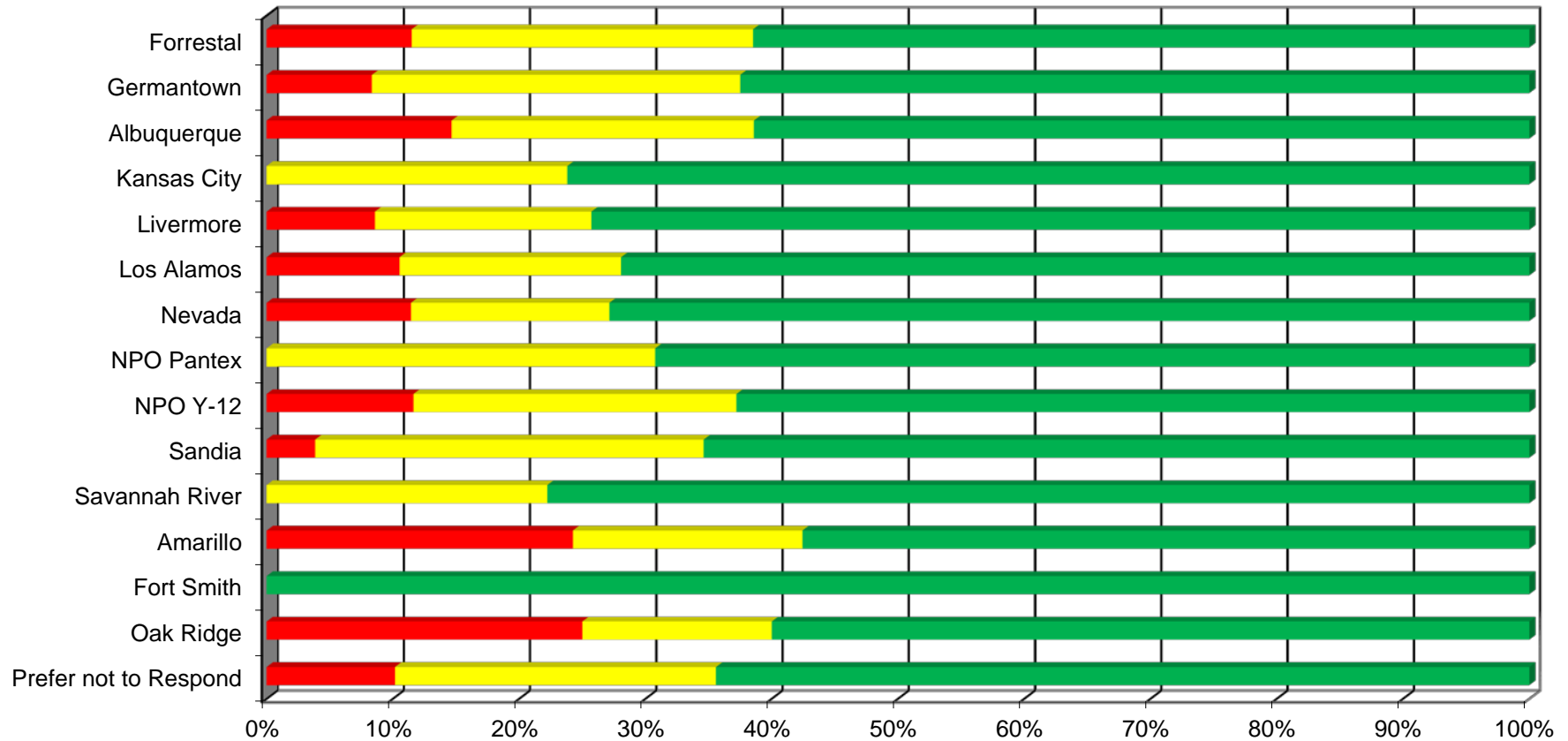
- Many interviewees perceive that this is one of the weakest areas for NNSA. Many indicated they do not perceive that they have avenues that they are comfortable with to voice issues or problems and they hold back on doing so.
- Several issues identified among the Safety Conscious Work Environment questions.



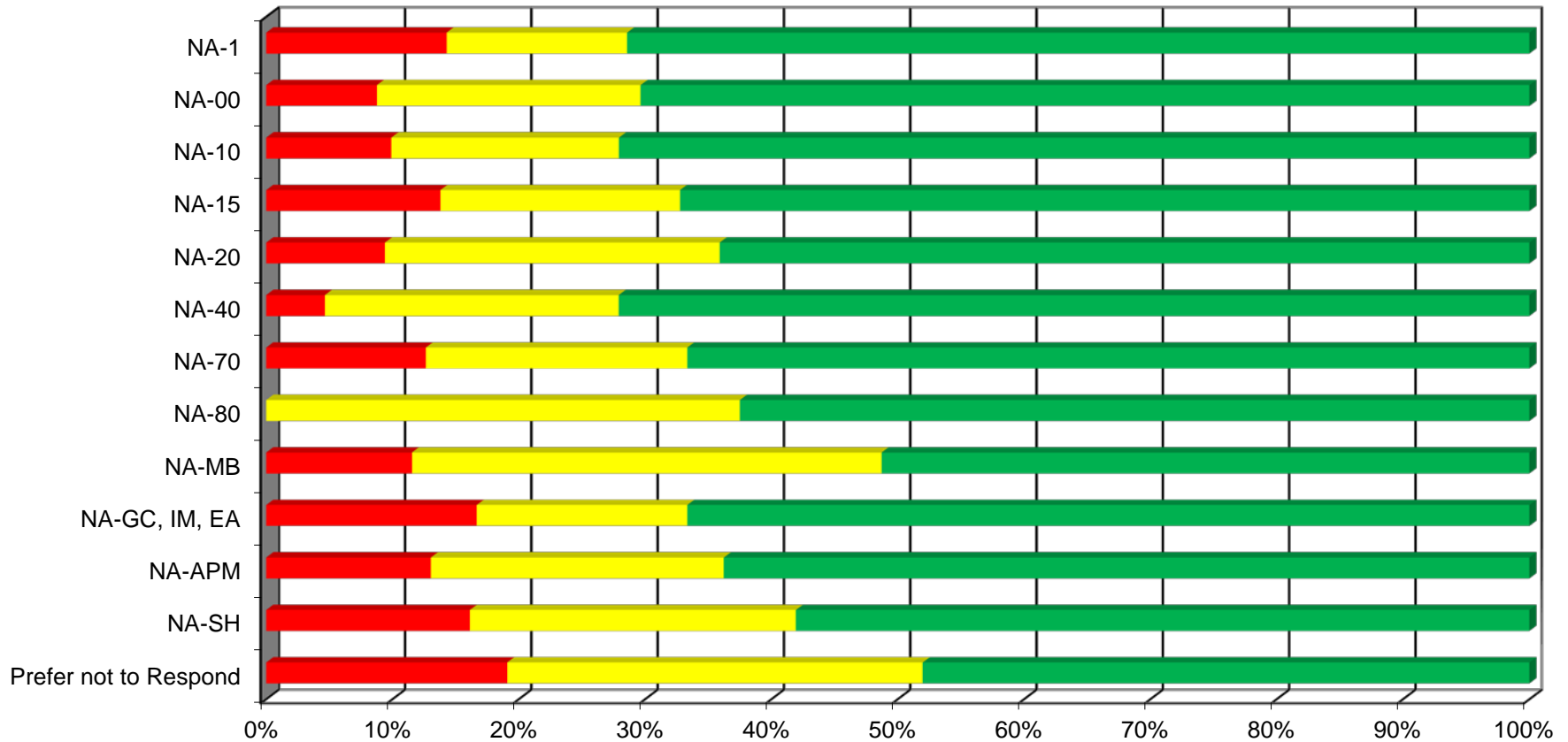
Overall Responses for DOE NNSA on Safety Conscious Work Environment Questions



Compare NNSA Locations on SCWE Question - Responsible for Identifying Problems



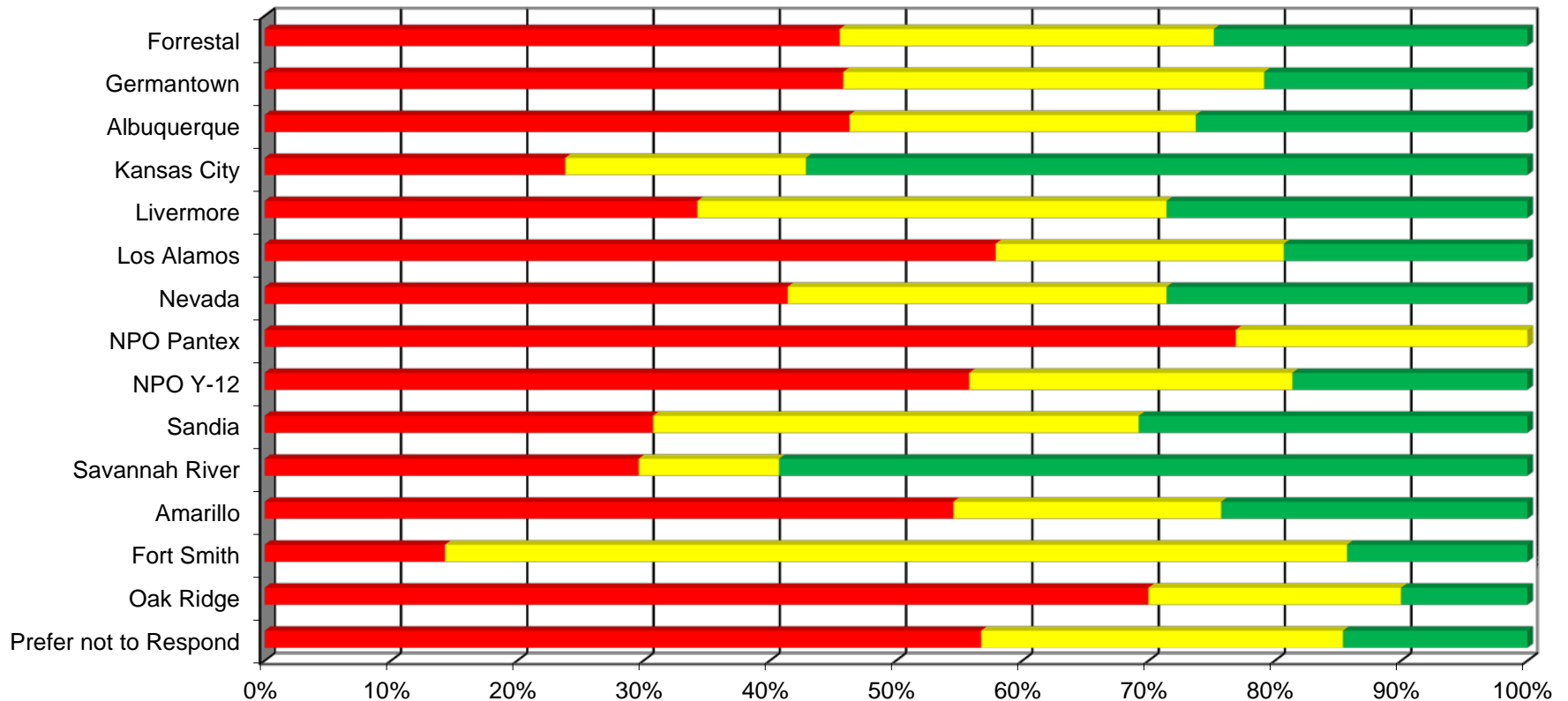
Compare NNSA Work Groups on SCWE Question - Responsible for Identifying Problems*



*Significant differences exist between work groups on this question



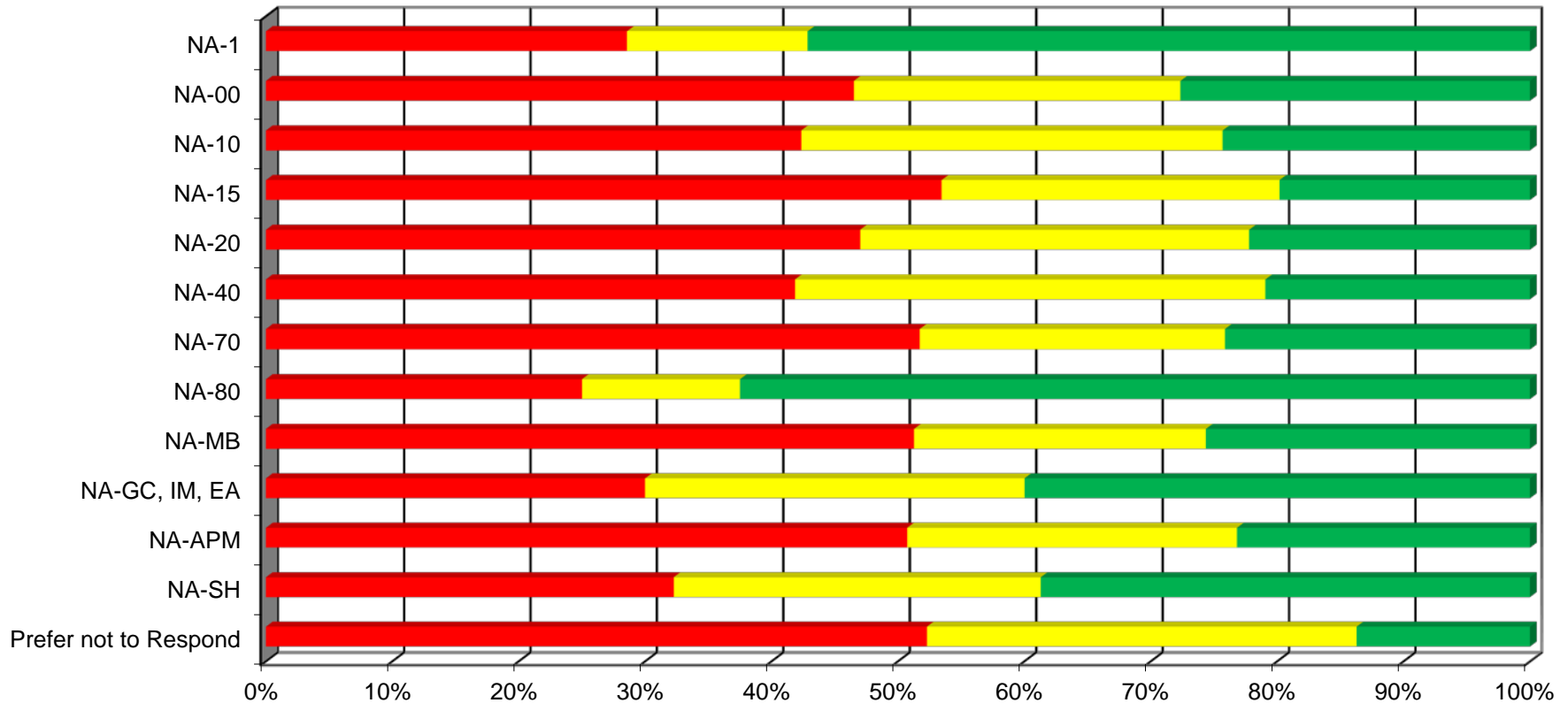
Compare NNSA Locations on SCWE Question - Can Openly Challenge Management Decisions*



*Significant differences exist between work groups on this question



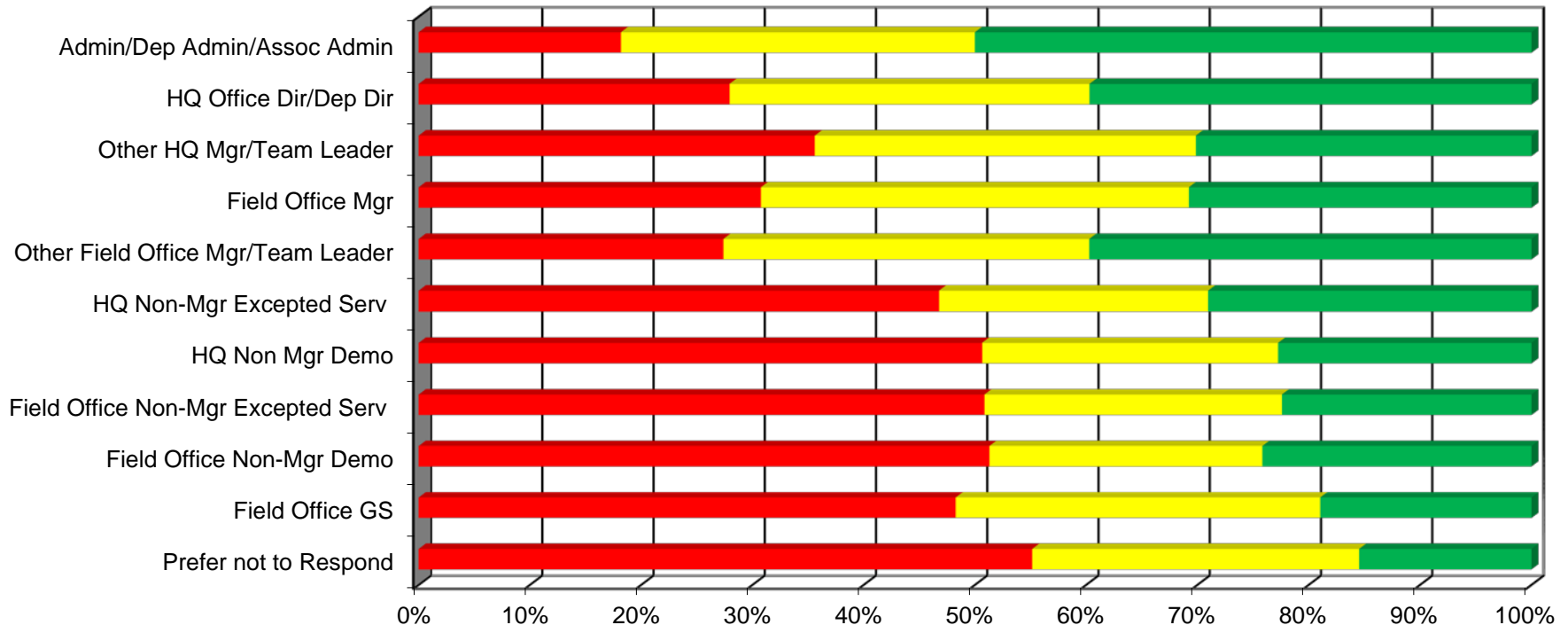
Compare NNSA Work Groups on SCWE Question - Can Openly Challenge Management Decisions*



*Significant differences exist between work groups on this question



Compare NNSA Employee Categories on SCWE Question - Can Openly Challenge Management Decisions*

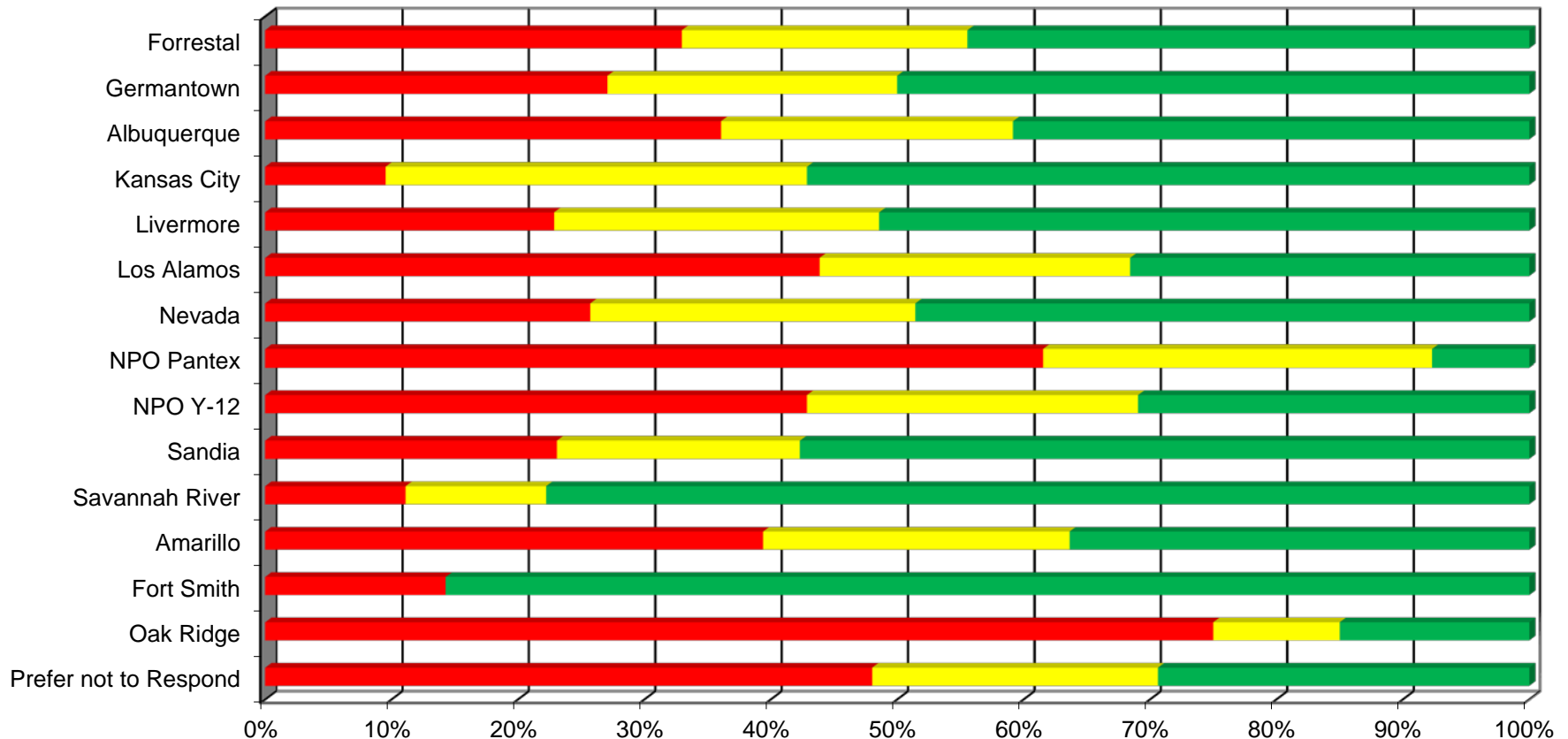


*Significant differences exist between work groups on this question



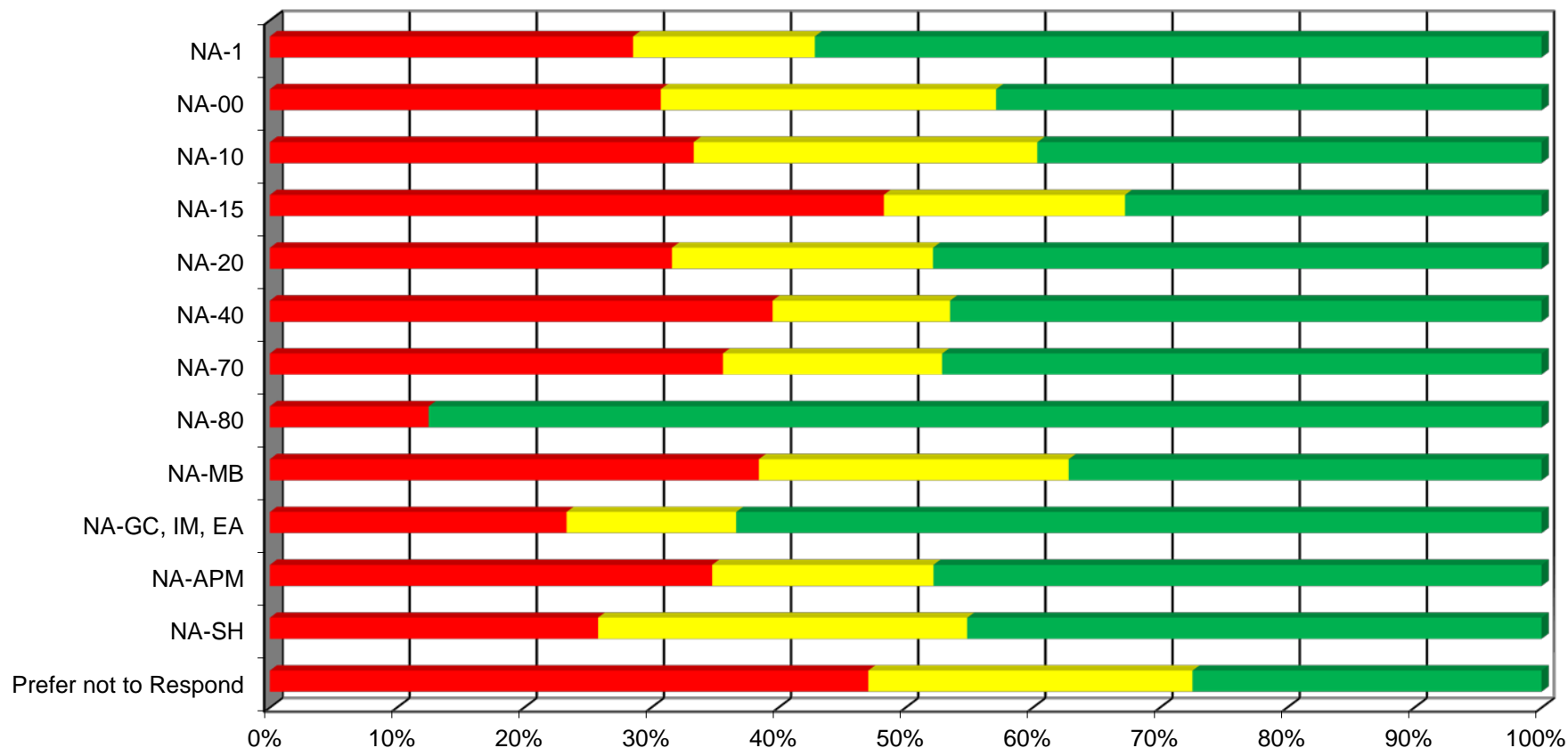
Compare NNSA Locations on SCWE Question

- Can Approach Management with Concerns*



*Significant differences exist between work groups on this question.

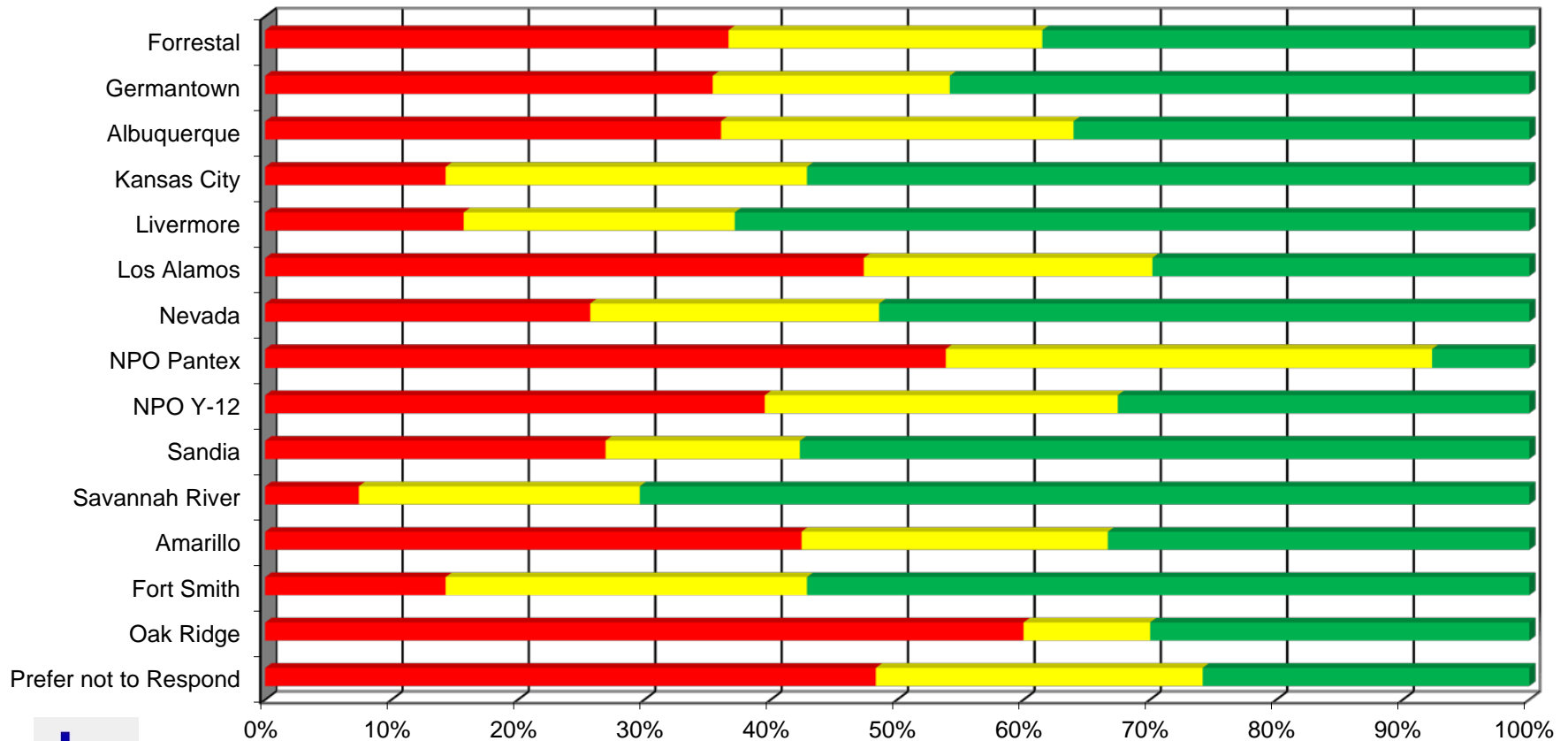
Compare NNSA Work Groups on SCWE Question - Can Approach Management with Concerns*



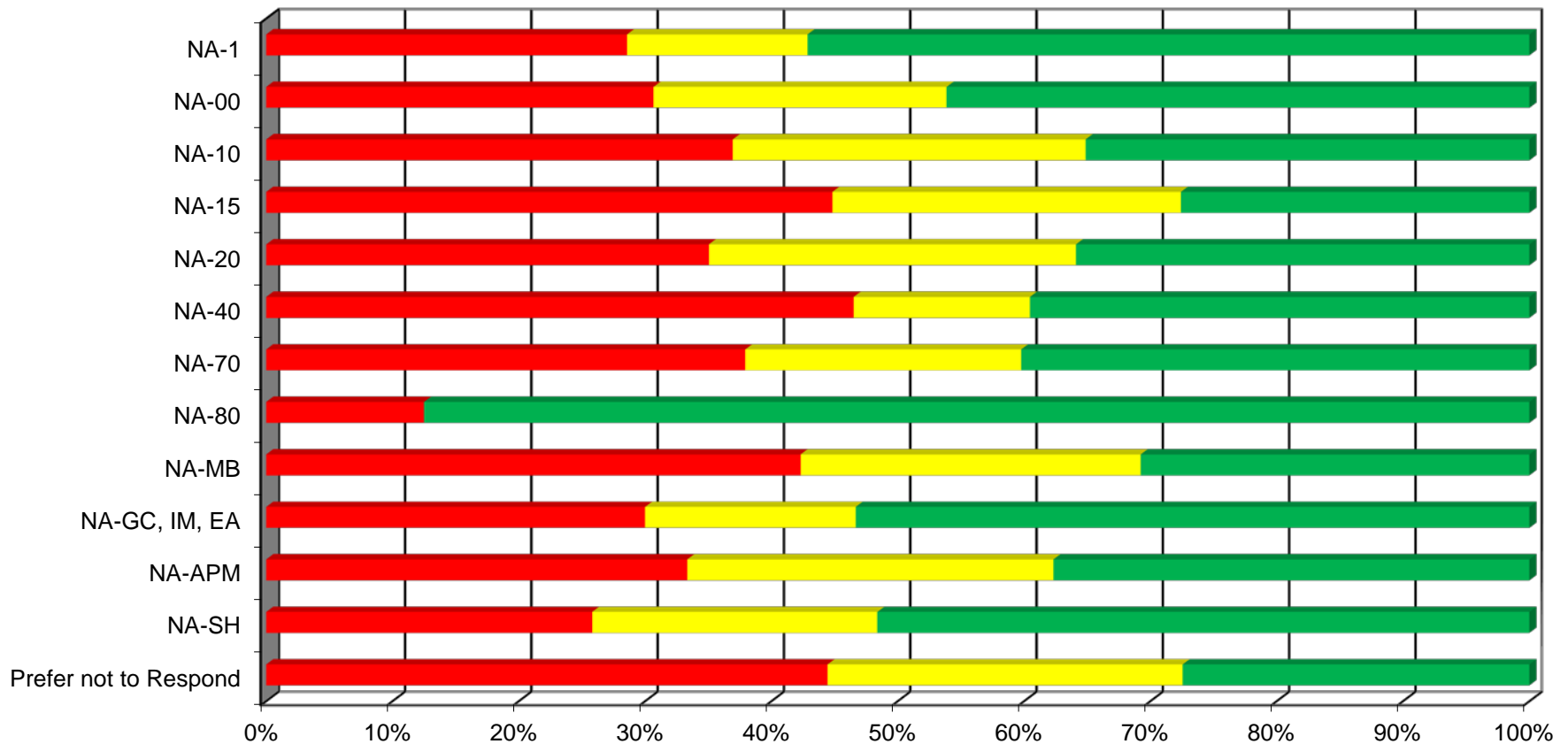
*Significant differences exist between work groups on this question.

Compare NNSA Locations on SCWE Question

- Management Wants Concerns Reported & Willingly Listens to Problems*

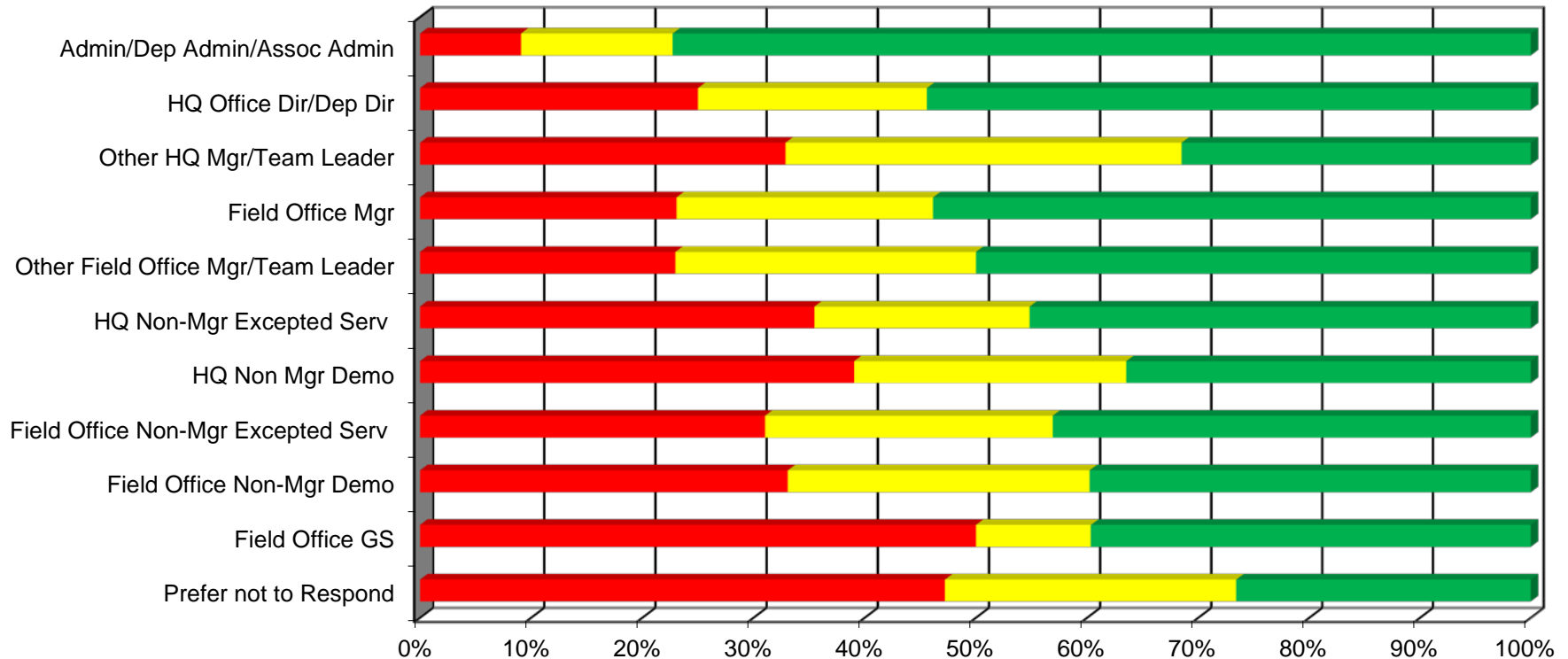


Compare NNSA Work Groups on SCWE Question - Management Wants Concerns Reported & Willingly Listens to Problems*



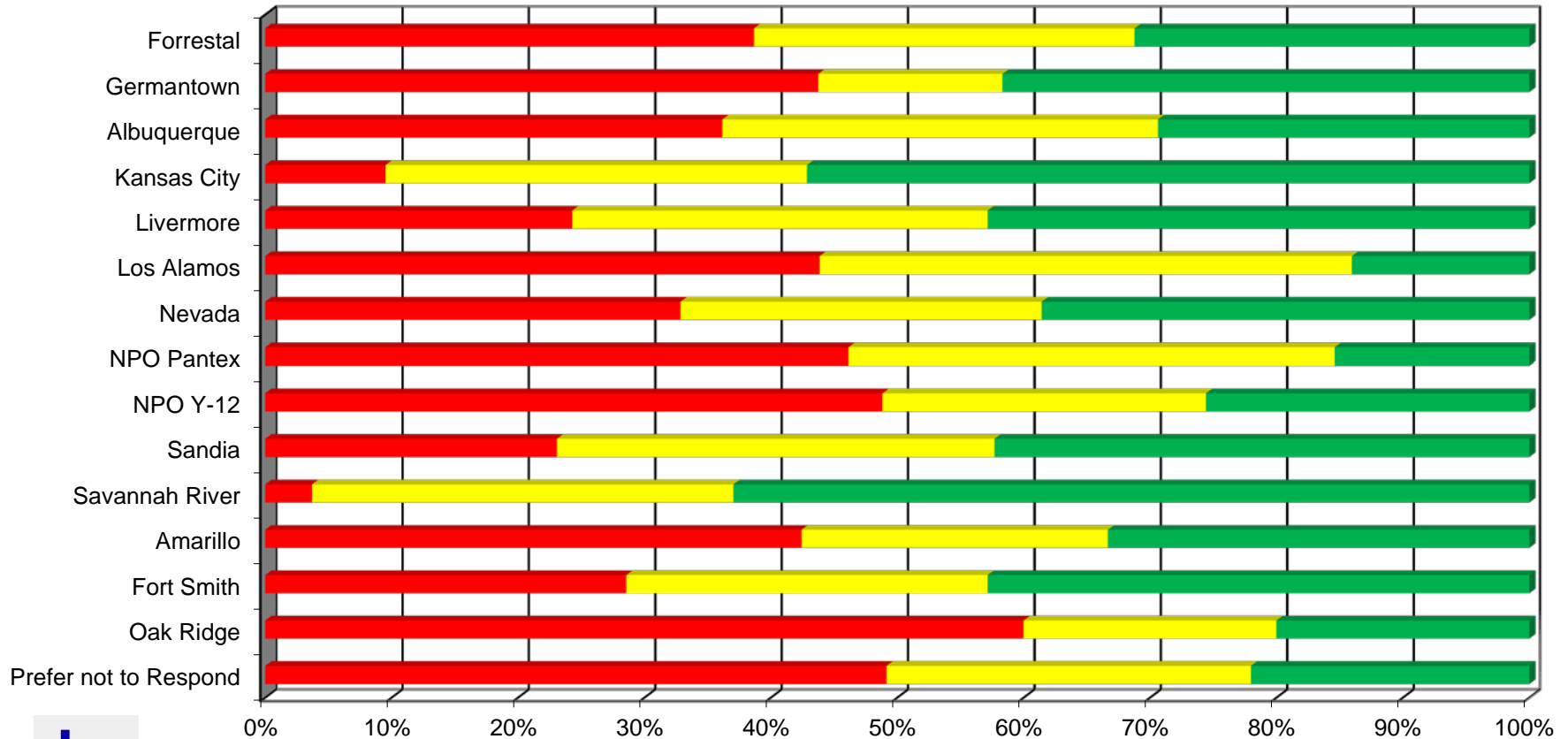
*Significant differences exist between work groups on this question.

Compare NNSA Employee Categories on SCWE Question - Management Wants Concerns Reported & Willingly Listens to Problems*



*Significant differences exist between work groups on this question.

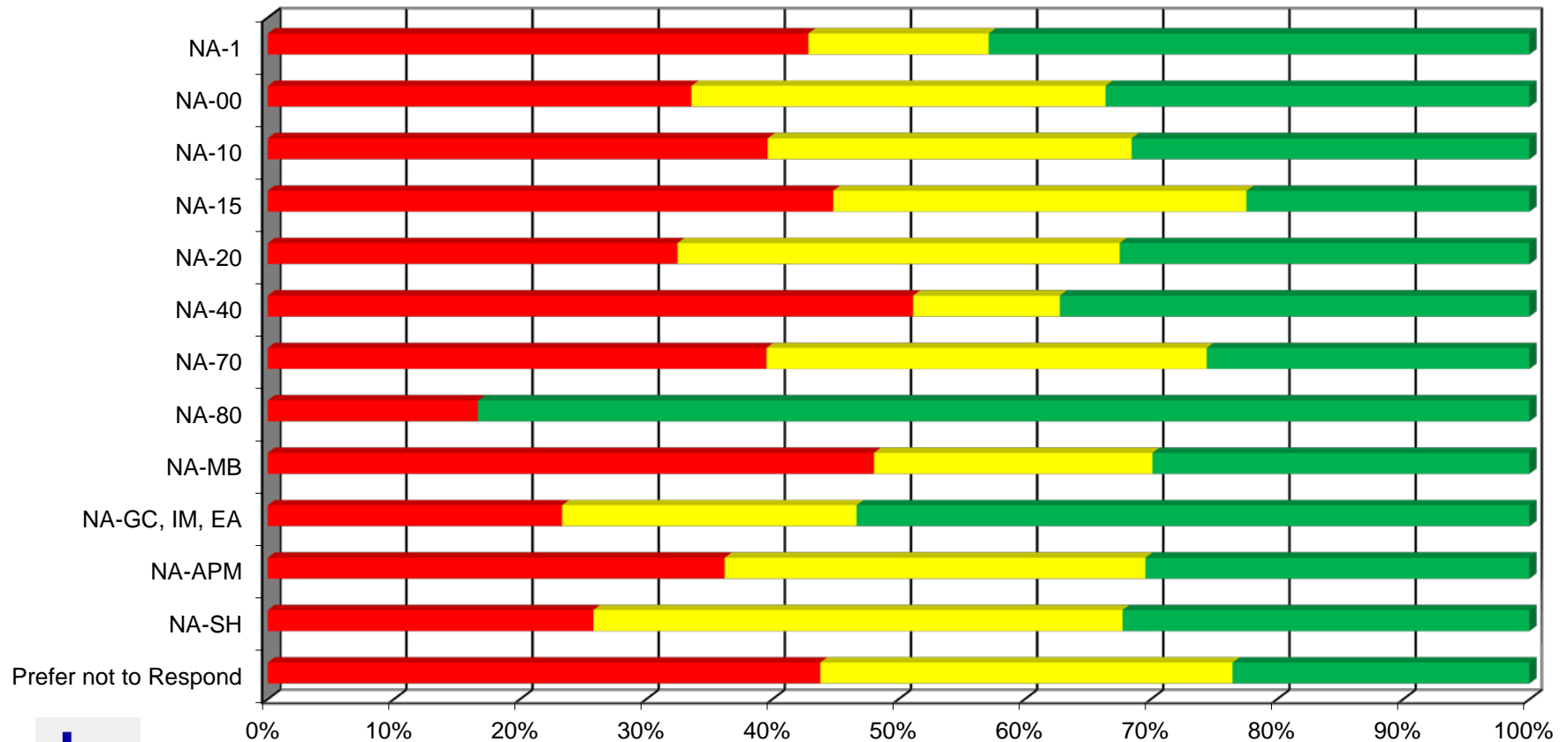
Compare DOE NNSA Locations on SCWE Question - Concerns Raised Are Addressed*



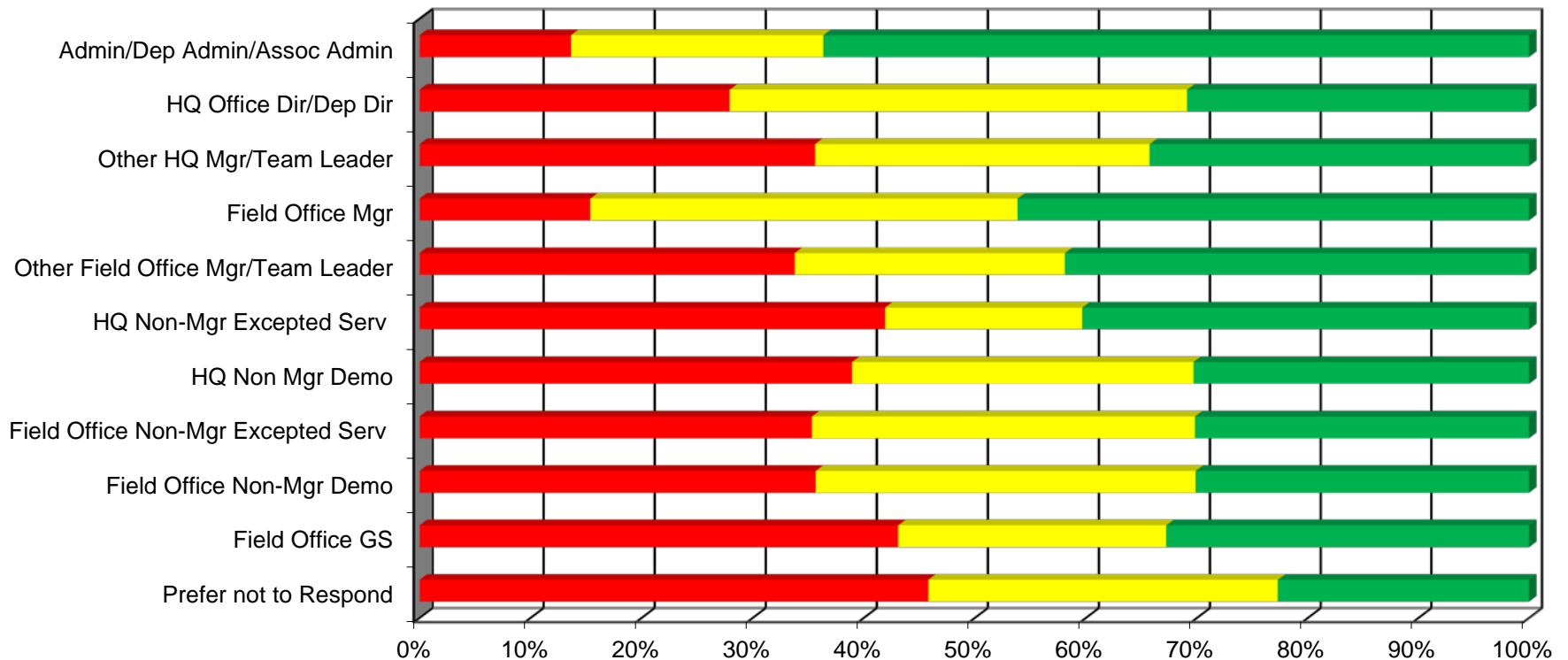
*Significant differences exist between work groups on this question

Compare NNSA Work Groups on SCWE

Question - Concerns Raised Are Addressed



Compare NNSA Employee Categories on SCWE Question - Concerns Raised Are Addressed*



*Significant differences exist between work groups on this question

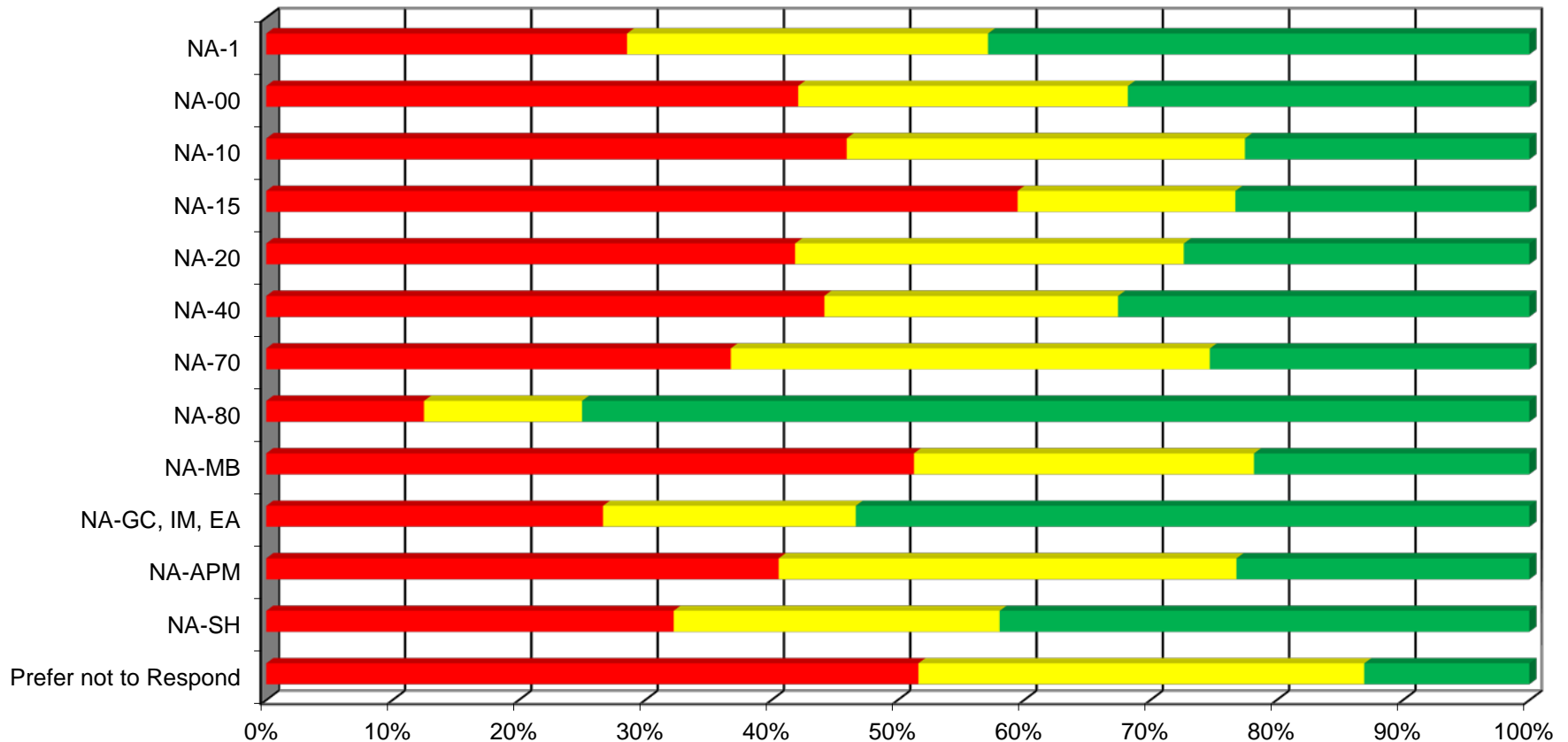


Compare NNSA Locations on SCWE Question - Helpful Criticism is Encouraged*



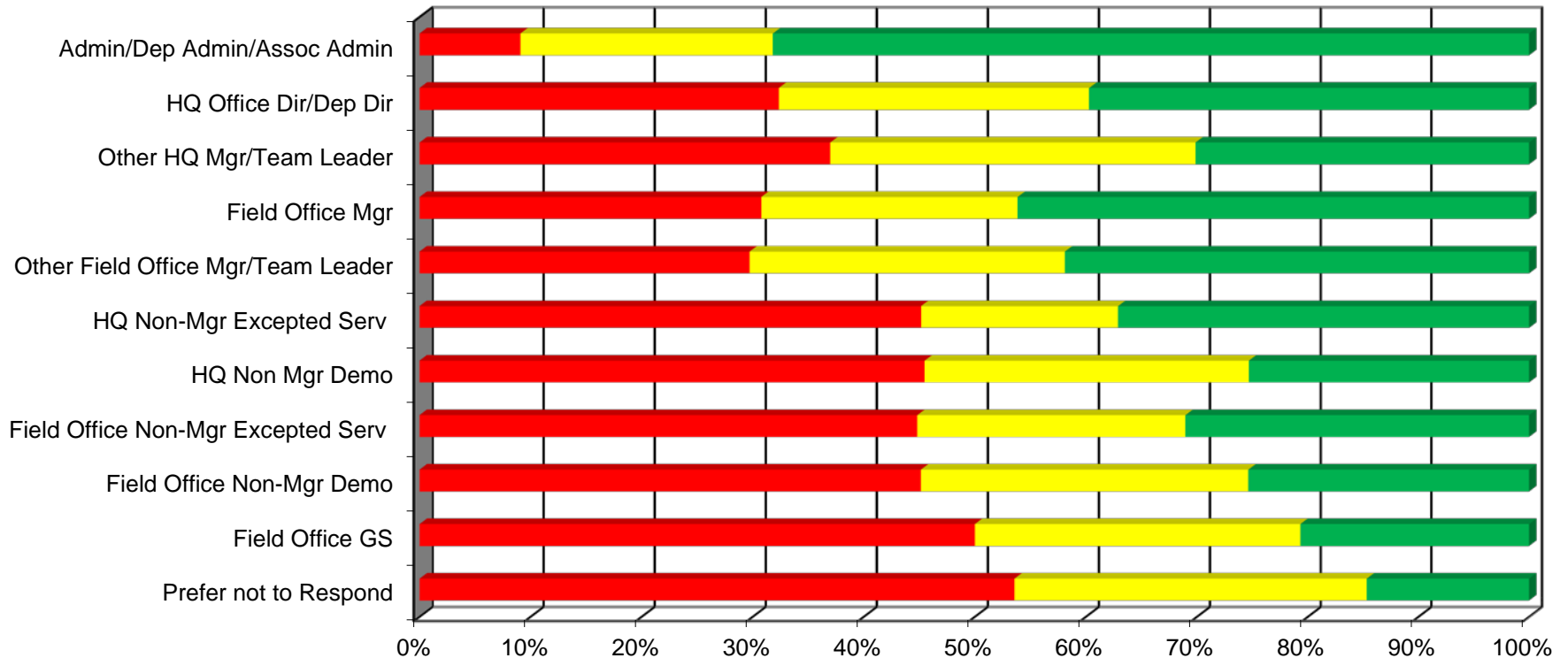
*Significant differences exist between work groups on this question.

Compare NNSA Work Groups on SCWE Question - Helpful Criticism is Encouraged*



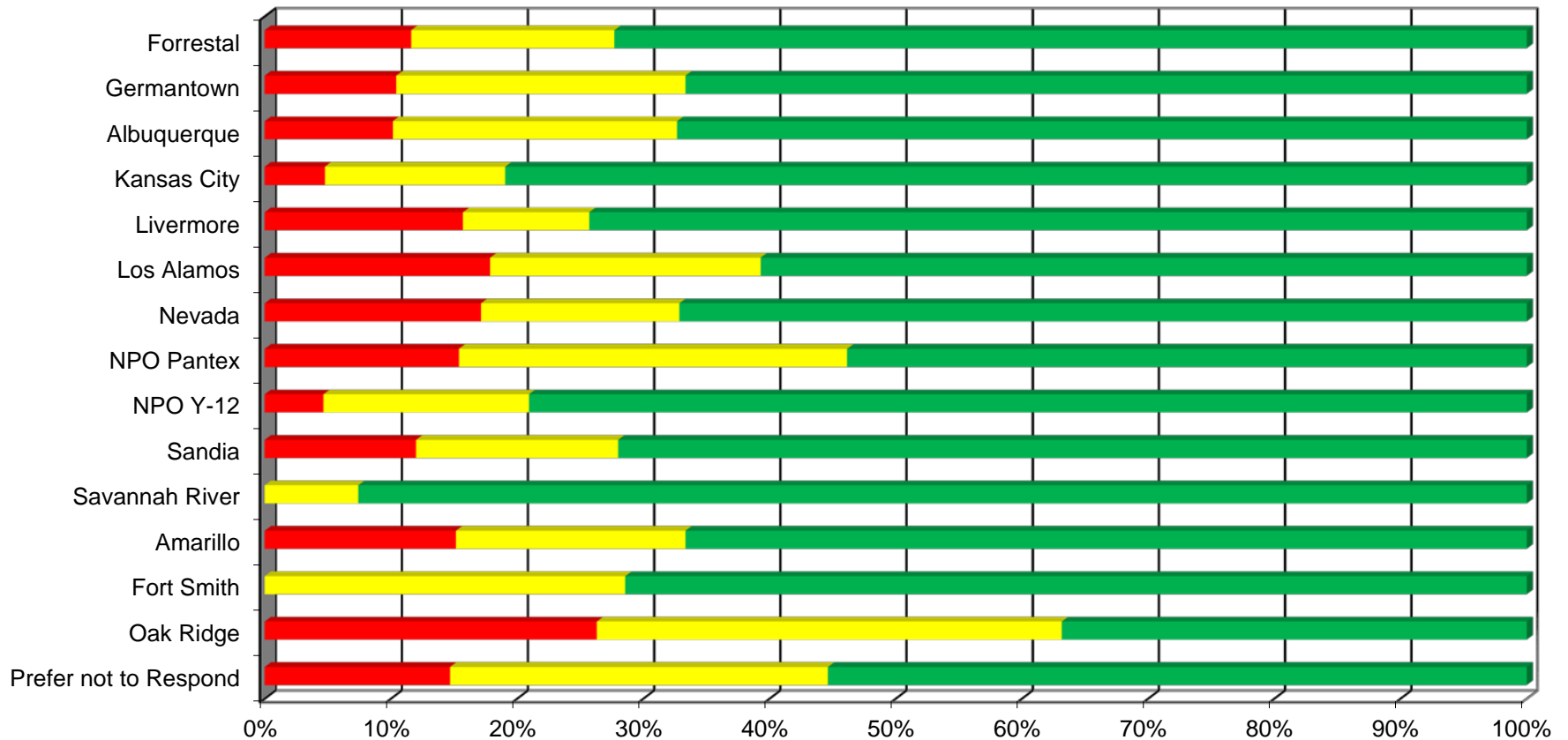
*Significant differences exist between work groups on this question.

Compare NNSA Employee Categories on SCWE Question - Helpful Criticism is Encouraged*



*Significant differences exist between work groups on this question.

Compare NNSA Locations on SCWE Question - Retaliation Not Tolerated by Management*



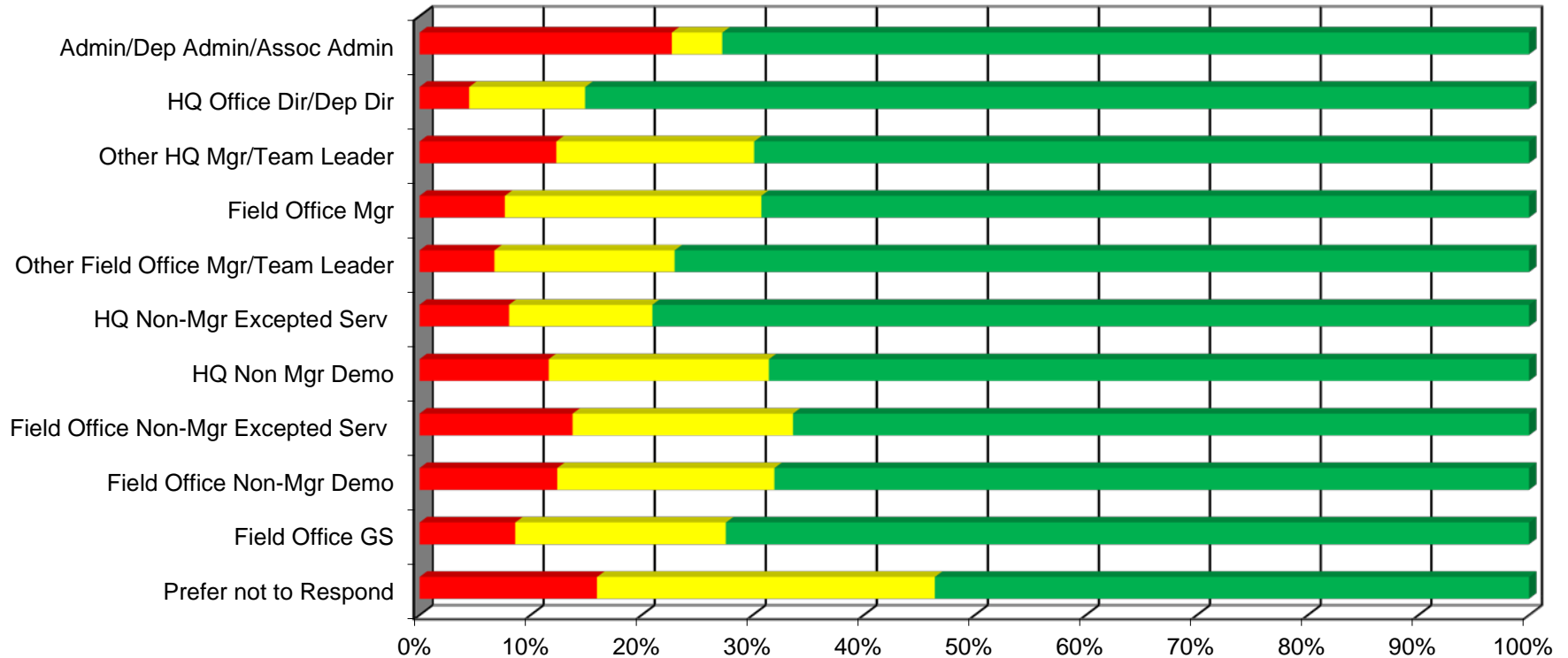
Compare NNSA Work Groups on SCWE Question - Retaliation Not Tolerated by Management*



*Significant differences exist between work groups on this question



Compare NNSA Employee Categories on SCWE Question - Retaliation Not Tolerated by Management*



*Significant differences exist between work groups on this question



Effective Safety Communication

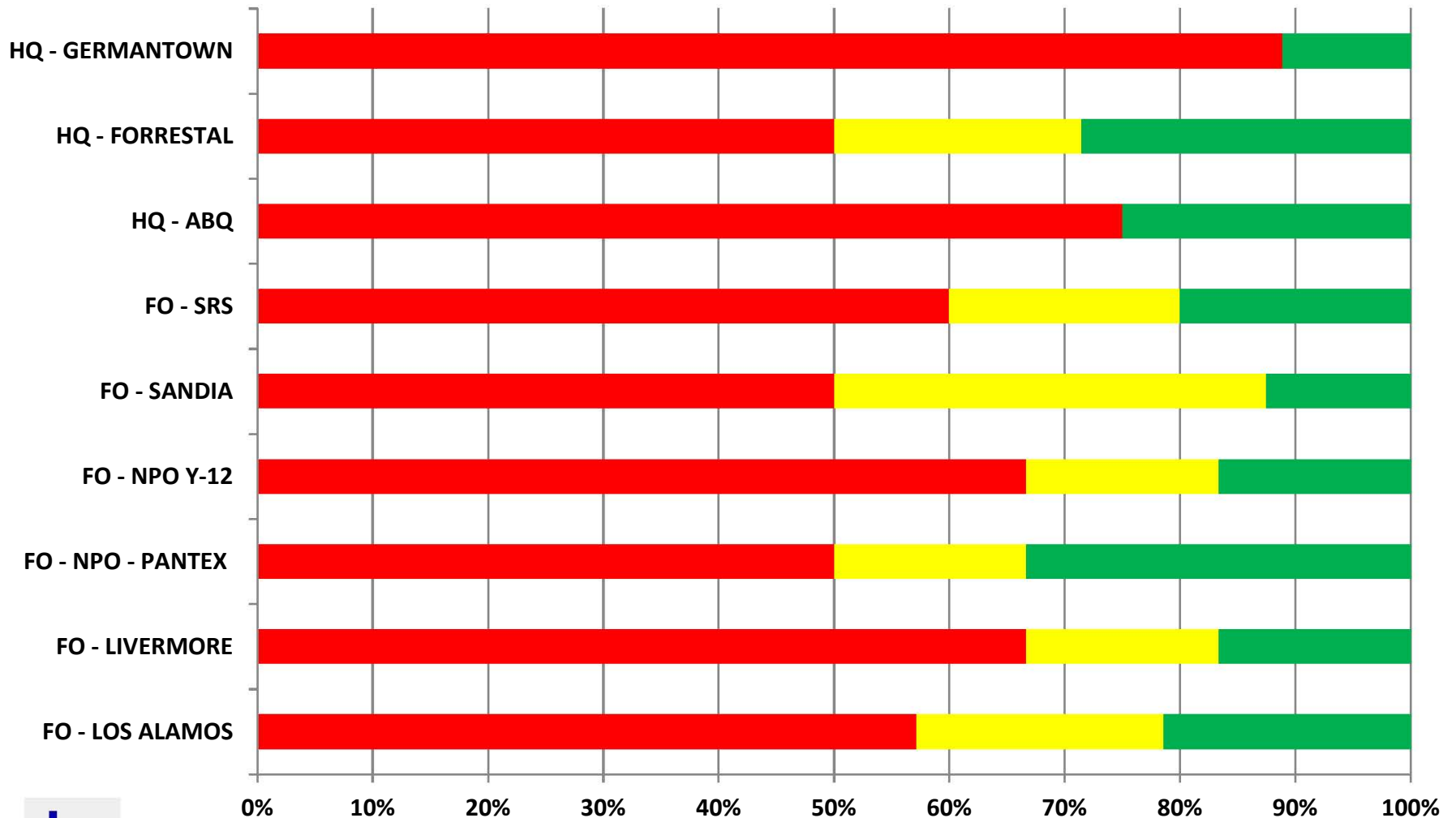
Positive Observations

- Multiple mechanisms are available for communication.
- Most interviewees indicated communication with their peers and within their particular groups works well.

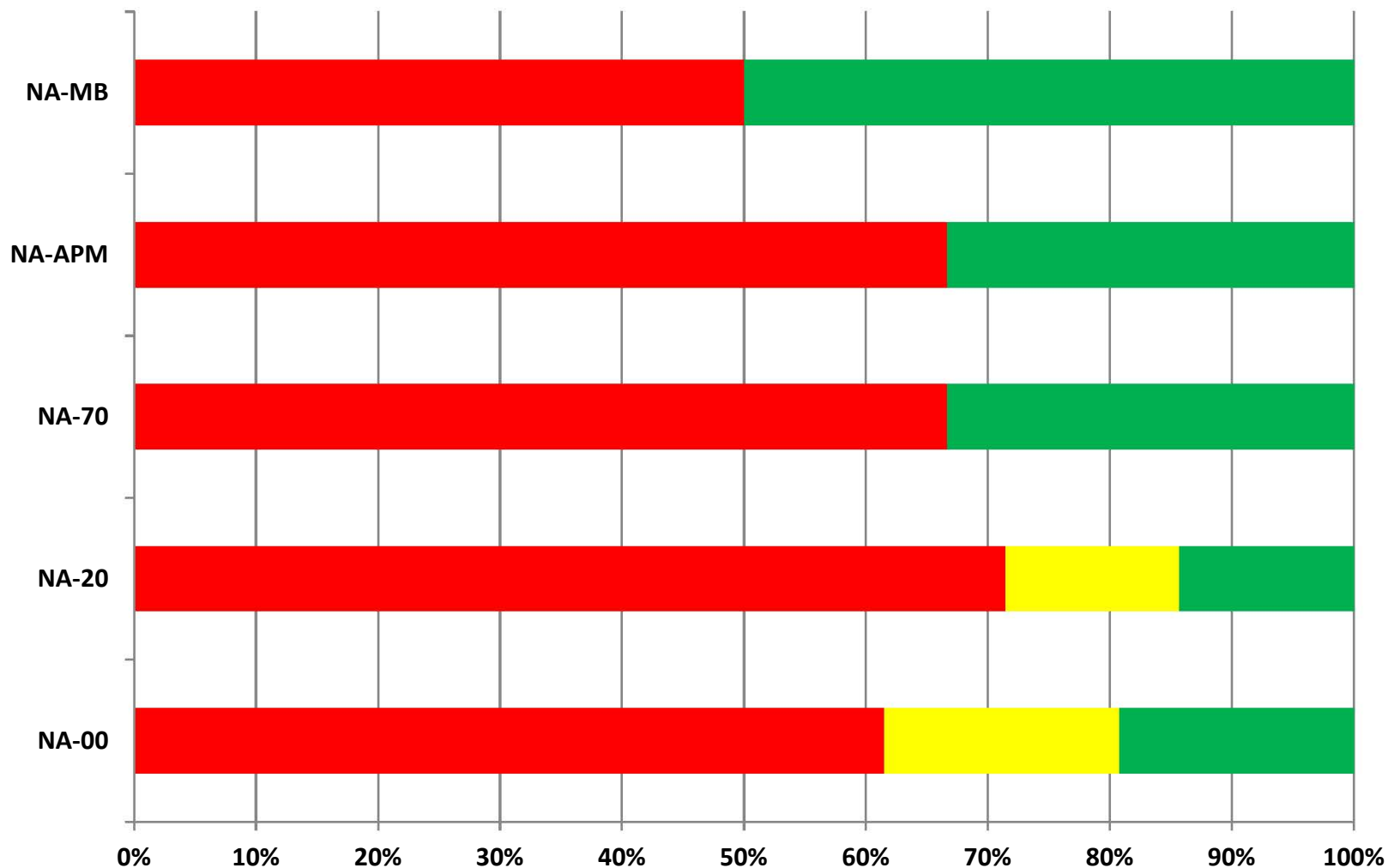
Areas in Need of Attention

- Issues around the effectiveness of communication were described.
- Most interviewees described NNSA as very poor when it comes to change management.

Compare DOE NNSA Locations on Communications BARS



Compare DOE NNSA Work Groups on Communications BARS



Respectful Work Environment

Positive Observations

- Interviewees indicated that within some offices there is a sense of collaboration and respect for co-workers and they perceive a sense of working together to accomplish the mission.

Areas in Need of Attention

- Many interviewees expressed the perception that staff are undervalued, not well respected and often not asked to help solve problems.
- Accuracy and trust in communication are not viewed very positively by survey respondents.

NNSA SURVEY SUMMARY BY LOCATION

	FOR	GER	ALB	KC	LIV	LA	NEV	PAN	Y12	SAN	SR	AMA	FS	OR	PNR
HAZ	--	-	-	-				-		-			+	++	
MGE	--	-	--	+		-	+	-	-	+	++	-		-	-
EMA	--	-	-	++	+	-	+		+				++		-
SCWE1															
SCWE2	-	-		++	+	-		--	-	+	++	-		--	--
SCWE3		+		+	+	-	+	--	-	+	++	-		--	-
SCWE4		-		+	+	-	+	-	-	+	++	-		-	--
SCWE5	-	-	-	+		-		-	-		++	-		-	--
SCWE6			-	+	+	-	+	-	-	+	++			-	--
SCWE7		-		+	-	-	-		+		++			--	-
C1		-		+		-		-	-	+	++	-	-	--	-
C2															
C3															
C4		+		+	+	-	+		+	+	++	+		--	-
C5		-		+	+	-	+			+	++			--	-
C6	+		+	++		-					++	+		-	--
C7															
C8				+	+	-	+		-	+	++	+		--	-
C9		-		+	+	-			-		++	+		--	-
C10				+	++	-		+		+	+	+		--	-
C11	+		-	+	--	-		-	-		++	-		-	-
C12															
COT				++		--			-		+			-	-
COD	--	--	--	++	--	--	--	--	--		++			--	--
COH				++	-	-	+				+				--
SAF															
SCWE		-		+		-		-	-	+	++	-		--	--
COM TRST				++		--		-	-	-	+	-	+	-	--
COM ACC			-	++	+	-	+	-	-		+			-	--
COMINT	+		--	++	-			-					+		--
CONST		-	-	+	-	-		-	-		++	-		-	--
P-2				++	++	++	++			++	++			++	++

Summary of Significant Differences Between Work Groups on Survey Scales

	NA-												Prefer Not to Respond
	1	00	10	15	20	40	70	80	MB	GC, IM, EA	APM	SH	
HAZ				++		++		-	-	--	-	+	+
MGE		+	--	-		--	--	++	--	-	-		
EMA		++					--		--		--		--
SCWE1		++	+			+			-				--
SCWE2				-				++					--
SCWE3			-	-		-	-	++	-	+	-	+	--
SCWE4			-	--	-	-	-	++	-		-	+	--
SCWE5													
SCWE6			-	--	-	-	-	++	-	+	-	+	--
SCWE7		+	+	-	+		-		-			++	--
C1		+	++	-	+	-		++	+	+	+		--
C2		+	++	-	+	-	+						--
C3	++			-	-	+	-	+	-				--
C4	++	++					-			+	++	++	--
C5													
C6													
C7													
C8		+	+	-			-	++		++	+	+	--
C9			-	-	+		-	++	-	+	+		--
C10		++					--		--				--
C11		-	+	-	+	-	+	++					--
C12													
COT				-		-	--	++	-		-	-	--
COD													
COH				-		-	-	++	-			-	--
SAF													
SCWE		+	+	-	+		-	++	-	+	-	+	--
COM TRST													
COM ACC				-		-	-	++	-	-	-	-	--
COMINT		+	++				--	++	-				--
CONST	+		++	-	+	-	+	++					--
P-D	++	+		-			-		-		+	+	--
A-D		+			+	+	-		-	++	+	+	--

NNSA Employee Category Survey Summary

	Admin/ Dep Admin/ Assoc Admin	HQ Office Dir/ Dep Dir	Oth HQ Mgr/ Team Lead	Field Office Mgr	Oth Field Office Mgr / Team Lead	HQ Non-Mgr Excepted Serv	HQ Non- Mgr Demo	Field Office Non-Mgr Excepted	Field Office Non-Mgr Demo	Field Office GS	Prefer not to respond
HAZ	+	-	-	++	+	-	--				
MGE	+		-	++	++		--	+			--
EMA	++	-	--		++		--	+	--		--
SCWE1	++	++	+		+	-	--	+	-	-	--
SCWE2	++	+	+		++		--	-	-	-	--
SCWE3	++	+			+	+		-		-	--
SCWE4	++	+	-	+	+		-			-	--
SCWE5	++	-		+	+		-	-	-	-	--
SCWE6	++	+		+	+					-	--
SCWE7		++			+	+	-	-		+	--
C1	+	+	+		++			-	-	-	--
C2											
C3	+	+	-	++	+	-	-	-		-	--
C4	++	++	+	++	+	+		-			--
C5	+	++		++			-	-	+		--
C6	++	+	+	+	+			-		+	--
C7											
C8	++	++	++		++	++	++		++		--
C9	++	++	++		++	++	++	++	++		--
C10		++		++	++	++		++	++		--
C11	++	+			++			--	--	-	--
C12											
COT	++			+				-	-	-	--
COD	++	-	-		+		-	-	-	-	--
COH	++		+		+	-				-	--
SAF	++	+	-		+	-	-	-	-	-	--
SCWE	++	+		+	+					-	--
COM TRST	++	+	-	+	+				-	-	--
COM ACC	++	+	-	+	+	+			-	-	--
COMINT	++	+	+		+	+			-	-	--
CONST	+	+	+		++		+	-	-	-	--
P-D	+	+	+	++	+	-					--
A-D	++	++	++		++		++	++	++	++	--

Questioning Attitude

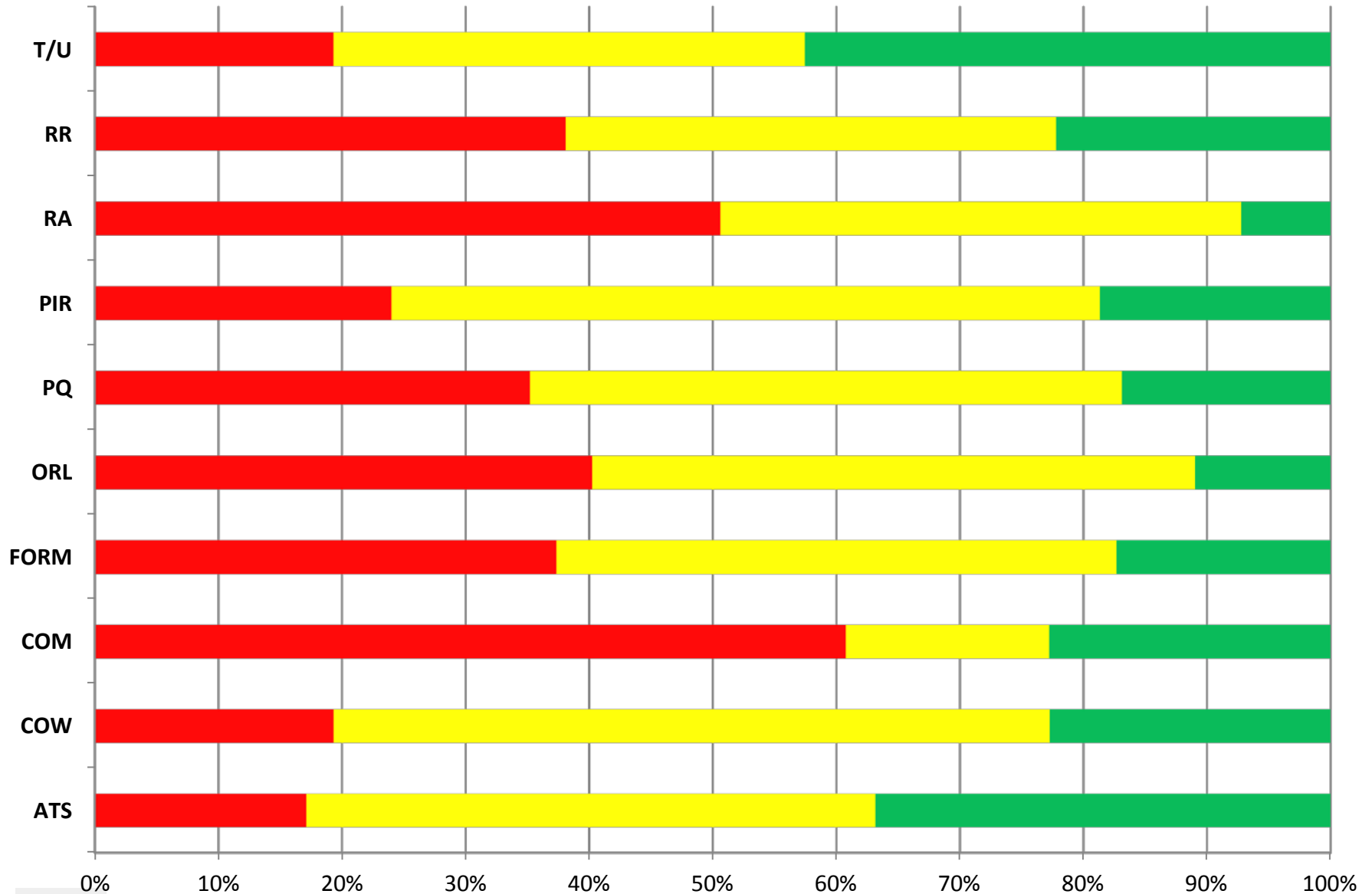
Positive Observations

- Some interviewees described being supported to challenge conditions and activities and to raise issues and concern

Areas in Need of Attention

- Several interviewees indicated that a questioning attitude was not encouraged and in fact sometimes discouraged by NNSA Leadership and the perception exists that this attitude is not really appreciated or desired.
- Many interviewees do not perceive that there is an appropriate mechanism for them to express their concerns or raise their questions.

Overall Results for DOE NNSA on BARS



Summary

- Wishes
- Conclusions
- Recommendations

Compare DOE Facility Scores on Survey Scales

Scale	DOE 1	Cont. 2	DOE 2	Cont. 3	DOE 3	Cont. 4	DOE 4	DOE 5	Cont. 6	DOE 7	Cont. 7	DOE 8	DOE NNSA
Commitment	3.05	3.63	3.64	3.63	3.41	3.43	3.61	3.19	3.13	3.36	3.51	2.73	2.83
Coordination	2.96	3.50	3.45	3.23	3.05	3.25	3.30	2.98	2.99	3.39	3.23	2.91	2.84
Cohesion	3.54	3.93	4.46	3.91	3.39	3.79	3.75	3.73	3.53	3.39	3.40	3.56	3.44
Job Satisfaction*	N/A	5.62	6.38	5.96	5.71	5.20	5.18	4.89	N/A	N/A	N/A	N/A	N/A
Safety	3.91	4.41	4.75	4.36	4.19	4.39	4.43	4.11	3.82	4.20	4.36	3.66	3.71
SCWE	3.53	4.04	4.33	3.77	3.61	3.69	3.88	3.50	3.30	3.62	3.76	3.03	3.16
Management Emphasis	4.20	4.48	4.62	4.52	4.06	4.25	4.26	3.71	4.01	4.59	4.28	3.58	3.63
Employee Awareness	4.14	4.33	4.31	4.38	4.00	4.41	4.35	3.60	4.10	4.53	4.30	3.60	3.58
Hazard	2.08	2.84	3.08	2.78	3.01	3.57	3.10	1.56	2.97	2.89	3.40	1.83	2.27
Communication Trust	3.78	3.98	4.56	3.91	3.75	3.80	3.64	3.63	3.53	3.73	3.68	3.56	3.48
Communication Accuracy	3.63	3.61	3.85	3.43	3.36	3.35	3.35	3.41	3.41	3.30	3.29	3.46	3.36
Communication Interaction	3.91	4.22	4.69	4.27	3.96	4.28	4.18	4.14	3.74	4.07	3.94	3.83	3.79
Communication Satisfaction*	N/A	5.29	5.62	5.32	5.29	4.70	4.82	4.86	N/A	N/A	N/A	N/A	N/A



*Note that these scales are 7 point scales while the rest are 5 point scales

Compare DOE Facility Scores on SCWE Questions

Question	DOE 1	Cont. 2	DOE 2	Cont. 3	DOE 3	Cont. 4	DOE 4	DOE 5	Cont. 6	DOE 7	Cont. 7	DOE 8	DOE NNSA
Responsible for Problem ID	3.94	4.19	4.62	4.23	3.77	4.39	4.21	4.09	3.85	3.73	4.23	3.55	3.79
Can Openly Challenge Management Decisions	3.01	3.63	4.62	3.40	3.36	3.37	3.61	3.19	2.89	3.50	3.45	2.46	2.64
Free to Approach Management w/Concerns	3.55	4.19	4.77	3.83	3.80	3.79	4.00	3.63	3.30	3.63	3.78	2.97	3.10
Management Wants Concerns Reported	3.44	4.14	4.15	3.74	3.55	3.65	3.83	3.40	3.21	3.60	3.79	2.92	3.04
Management Ensures Concerns are Addressed	3.32	4.11	4.15	3.68	3.44	3.64	3.82	3.31	3.14	3.63	3.76	2.81	2.89
Helpful Criticism is Encouraged	3.15	3.97	3.85	3.64	3.53	3.34	3.65	3.41	2.88	3.40	3.56	2.59	2.73
Retaliation is not Tolerated	4.31	4.01	4.15	3.86	3.77	3.83	3.83	3.49	3.86	3.83	3.77	3.92	3.95



Compare DOE NNSA Scores on OCI to Other Nuclear Corporate Groups

Scale	Corporate 1	Corporate 2	Corporate 3	DOE 1	DOE 8	DOE NNSA
Humanistic-Encouraging	3.81	3.41	3.41	3.31	3.07	3.07
Affiliative	3.84	3.34	3.26	3.28	3.27	3.15
Approval	2.43	2.58	2.34	2.47	2.91	2.77
Conventional	2.68	2.86	2.77	2.67	3.25	3.02
Dependent	2.85	3.10	2.92	2.83	3.42	3.24
Avoidance	1.95	1.99	2.04	2.19	2.46	2.47
Oppositional	2.53	2.47	2.49	2.45	2.43	2.43
Power	2.35	2.41	2.17	2.49	2.60	2.64
Competitive	2.16	2.24	2.10	2.18	2.32	2.39
Perfectionistic	3.17	3.18	3.08	2.68	3.08	2.91
Achievement	3.77	3.67	3.41	3.38	3.23	3.24
Self-Actualizing	3.58	3.14	3.11	3.06	2.90	2.90
Constructive	3.76	3.39	3.30	3.26	3.11	3.09
Passive-Defensive	2.48	2.64	2.52	2.54	3.01	2.87
Aggressive-Defensive	2.55	2.58	2.46	2.45	2.61	2.59

Compare DOE NNSA Scores on Additional Scales to Other Nuclear Corporate Groups

Scale	Corporate 1	Corporate 2	Corporate 3	DOE 1	DOE 5	DOE 8	DOE NNSA
Commitment	3.66	3.35	3.23	3.05	3.19	2.73	2.83
Coordination	3.36	2.99	3.10	2.96	2.98	2.91	2.84
Cohesion	4.10	3.76	3.69	3.54	3.73	3.56	3.44
Safety	4.30	4.08	3.90	3.91	4.11	3.66	3.71
Management Emphasis	4.43	4.10	4.32	4.20	3.71	3.58	3.63
Employee Awareness	4.51	3.89	4.19	4.14	3.60	3.60	3.58
Communication Trust	3.81	3.70	3.75	3.78	3.63	3.56	3.48
Communication Accuracy	3.90	3.76	3.74	3.63	3.41	3.46	3.36
Communication Interaction	4.16	4.09	3.89	3.91	4.14	3.83	3.79

Compare DOE NNSA Scores on SCWE Questions to Other Nuclear Corporate Groups

Question	Corporate 1	Corporate 2	Corporate 3	DOE 1	DOE 5	DOE 8	DOE NNSA
Responsible for Problem ID	4.67	4.06	4.14	3.94	4.09	3.55	3.79
Can Openly Challenge Management Decisions	3.79	3.08	3.20	3.01	3.19	2.46	2.64
Free to Approach Management w/Concerns	3.98	3.47	3.65	3.55	3.63	2.97	3.10
Management Wants Concerns Reported	3.88	3.53	3.64	3.44	3.40	2.92	3.04
Management Ensures Concerns are Addressed	3.59	3.35	3.57	3.32	3.31	2.81	2.89
Helpful Criticism is Encouraged	3.63	3.26	3.29	3.15	3.41	2.59	2.73
Retaliation is not Tolerated	3.84	4.24	4.28	4.31	3.49	3.92	3.95

**An Evaluation of Organizational Safety
Culture at the
U.S. Department of Energy National Nuclear Security
Administration**

Evaluation Team:

Mr. Patrick Cahalane, NNSA
Ms. Kim Gallegos, NNSA
Mr. David A. Holm, Senior Consultant, HPA
Ms. Suzanne Mellington, NNSA
Dr. Deborah A. Shurberg, Consultant, HPA
Mr. Michael E. Stein, Consultant, HPA
Lt. Col. Rasheem Wright, NNSA
Mr. Michael Zamorski, NNSA



Dr. Sonja B. Haber, Executive Consultant, HPA, Team Lead

July 2, 2013

TABLE OF CONTENTS

EXECUTIVE SUMMARY	3
1.1 Introduction	6
1.2 Background	6
1.3 Scope	7
1.4 Methodology	8
1.4.1 Functional Analysis	8
1.4.2 Structured Interview and Focus Group Protocol and Behavioral Anchored Rating Scales (BARS).....	10
1.4.3 Behavioral Observations.....	10
1.4.4 Organizational and Safety Culture Survey	11
1.5 Results	11
1.5.1 Leadership Safety Values and Actions	11
1.5.2 Problem Identification and Resolution	14
1.5.3 Personal Accountability.....	16
1.5.4 Work Processes.....	18
1.5.5 Continuous Learning.....	21
1.5.6 Environment for Raising Concerns.....	22
1.5.7 Effective Safety Communication.....	24
1.5.8 Respectful Work Environment.....	26
1.5.9 Questioning Attitude.....	27
1.6 Conclusions.....	28
1.7 Recommendations.....	29
1.8 References	30

EXECUTIVE SUMMARY

This report describes the results of an evaluation of the existing safety culture at the U.S. Department of Energy National Nuclear Security Administration (NNSA). This evaluation was conducted at the request of the Acting Administrator of NNSA. The population addressed in the evaluation included all federal employees, assigned to NNSA in either Headquarters or any of the Field Office locations. The evaluation was conducted in April and May of 2013 and included visits to the NNSA Headquarters Offices in Germantown, Maryland, Washington, DC, and Albuquerque New Mexico as well as the Kansas City, Livermore, Los Alamos, Nevada, NPO Pantex, NPO Y-12, Sandia, and Savannah River Field Offices.

The primary objective of the evaluation was to provide information regarding the status of the organizational safety culture at NNSA. The framework applied is that recently described by the U.S. Nuclear Regulatory Commission (NRC). The evaluation was conducted using a methodology that aligns with the current U.S. NRC procedures for independent organizational safety culture assessment. Positive observations and areas in need of attention with respect to the traits necessary for a healthy safety culture are presented. Conclusions regarding the results of the information collected on the safety culture traits are also presented to facilitate the identification of improvement strategies. Finally, recommendations are provided for some initial steps that the Evaluation Team believes are necessary to effectively implement and execute the actions that will result in improved safe and reliable performance.

The safety culture components important for the existence of a healthy safety culture within a nuclear facility have been identified (INSAG-15, 2002; INPO Principles for a Strong Nuclear Safety Culture, 2004; U.S. NRC Inspection Manual 0305, 2006). The U.S. NRC and its stakeholders have recently agreed upon nine traits which are viewed to be necessary in the promotion of a positive safety culture. These include:

- **Leadership Safety Values and Actions**
- **Problem Identification and Resolution**
- **Personal Accountability**
- **Work Processes**
- **Continuous Learning**
- **Environment for Raising Concerns**
- **Effective Safety Communication**
- **Respectful Work Environment**
- **Questioning Attitude**

Particular behaviors and attitudes have been identified to evaluate the extent to which the organization has attained these traits.

While the methodology used in this evaluation was based upon work originally developed with the support of the U.S. NRC to assess the influence of organization and management on safety performance, the methodology has also been effectively implemented in non-nuclear organizations, such as mining, health care, research, engineering, and transportation. The

methodology entails collecting a variety of information that is largely based upon the perceptions of the individuals in an organization, as well as conducting observations of individuals performing work activities. Perceptions often have the same effect as reality when it comes to influencing behavior and understanding basic assumptions. Therefore, the data collected regarding individuals' perceptions are critical to this type of evaluation.

The results of this evaluation have been presented using the 9 traits identified by the U.S. NRC as a framework for evaluating safety culture. In the context of that framework, the Evaluation Team identified that there are positive observations and areas in need of attention within each of the traits and specific examples are presented in each of the areas. The results are presented as they apply specifically to NNSA and all of the findings have implications for the organizational traits necessary to support a strong safety culture. In particular:

The Team recognizes that the NNSA Organization is generally comprised of dedicated and talented professionals that are committed to ensuring that the mission of NNSA is met and that the safety and security of the nation is supported. The NNSA Organization succeeds in meeting its mission because of these individuals and in spite of the bureaucracy and some significant organizational issues.

The NNSA senior leadership (NA-1 and Deputy and Associate Administrators) chose to make this Organizational Safety Culture Assessment all inclusive of its federal employee population. The Team recognizes the significance and commitment of that decision. However, execution and implementation of the decision was representative of many of the problematic organizational issues that reside within NNSA. The need for better planning and integration across offices, more effective communication at all levels of the organization, and the holding of individuals accountable for meeting expectations, all impacted the results of this assessment. Low response rates were obtained on the electronic survey, poor participation occurred in the focus groups, and many participants didn't understand why NNSA was conducting this assessment.

There is a lack of trust and respect for NNSA senior leadership by many employees across the organization. Individuals described not feeling valued or respected for their professional expertise and being instructed about what to do by leaders who generally do not understand the various functions that NNSA is responsible for. A lack of engagement by senior leadership of the staff combined with the perception of favoritism for a small group, contributes to the unfavorable perception held by many of the senior leadership team. The behaviors exhibited by senior leadership could be labeled as a 'culture of entitlement' and a 'culture of non-inclusion' for NNSA staff.

The NNSA Organization does not effectively manage change. There is no systematic organizational change management process. Several major changes were recently made without a clearly communicated strategy, without anticipation of the potential consequences of changes in roles and responsibilities, especially in the areas of safety and security, and without the necessary formalization ahead of the change to facilitate an effective transition. All the changes have resulted in frustration among the workforce because of confusion in responsibility, uncertainty in authority, and a questioning of value to the mission.

Participants in this assessment clearly indicated that they believe that there are safety conscious work environment issues across the NNSA organization. Results from the electronic survey, discussions in interviews and focus groups, the poor participation in the focus groups and survey, the high number of survey respondents who chose the Prefer Not to Respond category when answering the survey demographic questions, a number of Hotline inquiries and requests made to the Team are all indicators of a fear of reprisal for raising potentially negative concerns or issues to or against NNSA leadership. These behaviors are also related to the values of the Passive Defensive (acting in a way that is self-protecting) and Aggressive Defensive (acting in a way that is self-promoting) Cultural Styles that employees perceive are needed in order to succeed, or in some cases to survive, in the NNSA Organization.

1.1 Introduction

This report describes the results of an evaluation of the existing Organizational Safety Culture at the U.S. Department of Energy (DOE) National Nuclear Security Administration (NNSA). This evaluation was conducted at the request of the Acting Administrator of NNSA. The population of the evaluation was all federal employees assigned to NNSA Headquarters and Field Office Organizations except for Naval Reactors (NA-30). The evaluation was conducted between April and May 2013. The primary objective of the evaluation was to provide information regarding the status of the organizational safety culture traits at NNSA. The evaluation was conducted using a methodology that aligns with the current U.S. Nuclear Regulatory Commission (NRC) procedures for independent safety culture assessment. In addition, the framework applied to the collection and analysis of data is that recently described by the NRC. Positive observations and areas in need of attention with respect to the traits necessary for a healthy safety culture are presented. Conclusions regarding the results of the information collected on the safety culture traits are also presented to facilitate the identification of improvement strategies. Finally, recommendations are provided for some initial steps the Evaluation Team believes are necessary to effectively implement and execute the actions that will result in improved safe and reliable performance.

1.2 Background

Evaluating the safety culture of a particular organization poses some challenges. Cultural assumptions, which influence behavior and, therefore, safety performance, are not always clearly observable. Schein (1992) presents a model of culture that helps in understanding how the concept can be assessed. In Schein's model, culture is assumed to be a pattern of shared basic assumptions, which are invented, discovered or developed by an organization as it learns to cope with problems of survival and cohesiveness.

According to Schein's three-level model, an organization's safety culture can be assessed by evaluating the organization's artifacts, claimed values, and basic assumptions. On the first level of the model are the organization's artifacts. Artifacts are the visible signs and behaviors of the organization, such as its written mission, vision, and policy statements. The second level consists of the organization's claimed or espoused values. Examples of claimed values might include mottos such as, "safety first" or "maintaining an open reporting work environment." The third level is comprised of the basic assumptions of the individuals within the organization. Basic assumptions are the beliefs and attitudes that individuals bring into the organization or that are developed because of experience within the organization. Examples of basic assumptions may include, "safety can always be improved" or "everyone can contribute to safety." The organization's basic assumptions regarding safety culture are less tangible than the artifacts and claimed values. They are often taken for granted within the organization that shares the culture.

Artifacts, claimed values, and basic assumptions are evaluated to identify the presence or absence of the of the safety culture traits that have been found to be important for the existence of a healthy safety culture within a nuclear facility (INSAG-15, 2002; INPO Principles for a Strong Nuclear Safety Culture, 2004; NRC Inspection Manual Chapter 0305, 2012). The U.S. Nuclear Regulatory Commission (NRC) and its stakeholders have recently agreed upon nine

traits which are viewed to be necessary in the promotion of a positive safety culture. These include:

- **Leadership Safety Values and Actions**
- **Problem Identification and Resolution**
- **Personal Accountability**
- **Work Processes**
- **Continuous Learning**
- **Environment for Raising Concerns**
- **Effective Safety Communication**
- **Respectful Work Environment**
- **Questioning Attitude**

Particular behaviors and attitudes have been identified to evaluate the extent to which the organization has attained these attributes. A variety of different methods are employed to collect information about the various behaviors and attitudes identified.

Most of the methodology used in this evaluation was originally developed with the support of the U.S. Nuclear Regulatory Commission (Haber, et. al., 1991) to assess the influence of organization and management on safety performance. The methodology entails collecting a variety of information that is largely based upon the perceptions of the individuals in an organization, as well as conducting structured observations of individuals performing work activities. Perceptions often have the same effect as reality when it comes to influencing behavior and understanding basic assumptions. Therefore, the data collected regarding individuals' perceptions are critical to this type of evaluation.

1.3 Scope of Safety Culture Evaluation

The scope of this evaluation was defined to include all federal employees assigned to NNSA, at Headquarters as well as at Field Office locations except for Naval Reactors. The Team was on site at NNSA during April and May, 2013. In addition, the Organizational Safety Culture Survey was electronically administered from April 10 through April 26, 2013.

The Team was comprised of four consultants from Human Performance Analysis, Corp and five NNSA employees. Two of the consultants have been involved in the collection of similar data at other DOE facilities as part of the Extent of Condition project that was conducted by DOE-HSS and the other two consultants have extensive experience implementing the methodology in numerous other organizations. All five of the NNSA employees involved in the data collection were specifically trained in the techniques specific to the Organizational Safety Culture Assessment methodology

This evaluation is a 'point in time' snapshot of NNSA. Although the team recognizes that NNSA may be making organizational and process changes to continue improving safety culture since the point in time at which the evaluation was conducted, the team has not evaluated the impact of those actions. Therefore, changes that have occurred subsequent to the time of the evaluation are not discussed in this report.

1.4 Methodology

The complete details of most of the methodology used in this evaluation are presented elsewhere (Haber and Barriere, 1998), but are briefly described in this section. Five methods are used to collect information on the organizational behaviors associated with the safety culture traits. These methods are:

- Functional Analysis
- Structured Interviews and Focus Groups
- Behavioral Anchored Rating Scales (BARS)
- Behavioral Observations
- Organizational and Safety Culture Survey

The use of multiple methods to assess any organizational behavior assures adequate depth and richness in the results obtained. In addition, confirming the results obtained through the use of one method with results obtained through the use of another method provides convergent validity for the results. A brief description of each method is provided below.

1.4.1 Functional Analysis

The purposes of the Functional Analysis are to: (1) clearly identify the organizational units of NNSA, (2) gain an understanding of each organizational unit's functions and interfaces, (3) examine the way in which information flows within and between units, and (4) identify the key supervisory and managerial positions of each organizational unit. Information to support this activity was obtained primarily through the review of the documentation identified below, some semi-structured interviews, and some observations of organizational activities. The organizational behaviors to be evaluated were identified from the information collected during this analysis.

Documentation Review

During the Data Collection Team's activities, some documents were reviewed including some DOE Orders, Policies, strategic plans and Program descriptions related to the scope of the evaluation. NNSA organizational charts and interoffice memoranda were also reviewed.

Organizational Behaviors

Based upon the information obtained from the Functional Analysis, the following organizational behaviors were identified for evaluation:

Attention to Safety – Attention to Safety refers to the characteristics of the work environment, such as the norms, rules, and common understandings that influence site personnel's perceptions

of the importance that the organization places on safety. It includes the degree to which a critical, questioning attitude exists that is directed toward site improvement.

Communication – Communication refers to the exchange of information, both formally and informally, primarily between different departments or units. It includes both the top-down (management to staff) and bottom-up (staff to management) communication networks.

Coordination of Work – Coordination of Work refers to the planning, integration, and implementation of the work activities of individuals and groups.

Formalization - Formalization refers to the extent to which there are well-identified rules, procedures, and/or standardized methods for routine activities as well as unusual occurrences.

Organizational Learning – Organizational learning refers to the degree to which individual personnel and the organization, as whole, use knowledge gained from past experiences to improve future performance.

Performance Quality – Performance quality refers to the degree to which site personnel take personal responsibility for their actions and the consequences of the actions. It also includes commitment to and pride in the organization.

Problem Identification and Resolution – Problem identification and resolution refers to the extent to which the organization encourages facility personnel to draw upon knowledge, experience, and current information to identify and resolve problems.

Resource Allocation – Resource Allocation refers to the manner in which the facility distributes its resources including personnel, equipment, time and budget.

Roles & Responsibilities – Roles and responsibilities refer to the degree to which facility personnel's positions and departmental work activities are clearly defined and carried out.

Time Urgency - Time urgency refers to the degree to which facility personnel perceive schedule pressures while completing various tasks.

These behaviors are then used to provide information on the nine traits according to the following framework:

- Leadership Safety Values and Actions – Attention to Safety; Resource Allocation; Time Urgency
- Problem Identification and Resolution – Problem Identification and Resolution
- Personal Accountability – Performance Quality; Roles and Responsibilities
- Work Processes – Coordination of Work; Formalization
- Continuous Learning – Organizational Learning
- Environment for Raising Concerns – Safety Conscious Work Environment Questions from electronic survey
- Effective Safety Communication - Communication

- Respectful Work Environment – Communication Trust Scale from electronic survey
- Questioning Attitude – Attention to Safety

1.4.2 Structured Interview and Focus Group Protocol and Behavioral Anchored Rating Scales (BARS)

The Structured Interview and Focus Group Protocol was derived from a database of interview questions. A particular subset of questions can be selected to provide a predefined focus to an interview or focus group session. The Team selected a set of questions to gather information related to the safety culture traits from the organizational behaviors identified from the Functional Analysis.

A total of 71 individual interviews and 50 focus groups were scheduled to be conducted as part of the assessment. Of the interviews scheduled, a total of 13 did not occur, either because people were not available during the assessment time frame or did not show up at the scheduled interview time. A total 433 individuals were invited to participate in focus group sessions but only 178 actually chose to participate. In some instances individuals responded to the email invitation indicating they would not be able to attend, a total of 92 actually responded to the email indicating they would not be able to participate. However 163 of those invited did not respond to the email invitation and did not show up to participate in the focus group session. So in total, 236 individuals were involved in either an interview or focus group session. The majority of the focus groups had a 50% or lower participation rate with 5 of the focus groups having no participants at all. Each interview lasted one hour and each focus group lasted approximately one and a half hours. A few less formal follow-up interviews were conducted to provide further clarification when necessary.

The Behavioral Anchored Rating Scales (BARS) were administered to most individuals who participated in the structured interviews and/or focus groups. Each interviewee and focus group participant was administered the BARS associated with four different organizational behaviors. The BARS provided the opportunity to quantitatively summarize qualitative data associated with the interviewee's perceptions of the organization. Approximately 925 BARS were collected representing 10 organizational behaviors.

1.4.3 Behavioral Observations

The use of behavioral observations provides an unobtrusive assessment of particular organizational behaviors and critical processes including work planning, work performance, management meetings, department meetings, and responses to planned or unplanned events. The selected organizational behaviors are specifically identified in the evaluation of the activities observed.

During the course of the Evaluation, a few observations were conducted of scheduled meetings based on a list of meetings provided by NNSA that were to occur during the evaluation period.

1.4.4 Organizational and Safety Culture Survey

The primary purpose of administering a survey is to measure, in a quantitative and objective way, topics related to the behaviors of interest. By conducting a survey, a broad sample of the individuals in the organization can be obtained and it is possible to gather information from a larger number of personnel than can be reached through the interview process alone. The survey used in this evaluation has been administered previously by the Evaluation Team Lead at over 60 different organizations.

A total population of approximately 2359 personnel was invited to participate in the survey of which 1258 actually completed the survey, representing a response rate of 53.3%. While this response rate is considered to be acceptable for the purposes of drawing representative conclusions regarding perceptions and attitudes about the work environment, this response rate is much lower than desirable and much lower than achieved at other Department of Energy facilities where the survey has been administered. In addition, a large percentage of participants elected to place themselves in the “prefer not to respond” category on a number of the demographic variables. On average, 13% of the employee population selected the “prefer not to respond” category, although this varied depending on the specific demographic variable. Less than 50% response rates were obtained for the following NNSA work groups: NA-15, NA-20, NA-MB, NA-GC, IM, EA, and NA-APM with the response rate within NA-15 being the lowest at 22.1%. The highest response rates were obtained within NA-1 (100%) and NA-70 (92%). Response rates by the NNSA locations also varied greatly and ranged from a low of approximately 19% at NPO-Pantex to a high of 81% for the Livermore Field Office.

1.5 Results

The results presented below summarize the insights gained from the evaluation team’s analyses of the structured interviews and focus groups, BARS, observations, and survey data. The results are presented in terms of the Safety Culture traits. Positive Observations and Areas in Need of Attention related to each trait are presented and provide the observations, insights and data to understand their impact on the overall health of Safety Culture. In addressing improvements, the Areas in Need of Attention should be considered and used as examples for an action that would address a behavior that would help several if not all of these points. It is not the intention that each Area in Need of Attention result in a corrective action. Developing a massive amount of corrective actions only perpetuates a compliance mentality, which is not conducive to creating and promoting a ‘healthy safety culture’.

1.5.1 Leadership Safety Values and Actions

Leaders demonstrate a commitment to safety in their decisions and behaviors.

Positive Observations

- Some interviewees identified examples of decisions and behaviors by leadership that were perceived to indicate a commitment to safety and performance improvement. These included:

- First Team in NA-20 was recognized as an effective action for establishing a strategic focus;
- Establishment of a user group to strategically review the fire exemptions for an underground facility and determine the applicable requirements represented a systematic evaluation of the balance between safety and mission;
- Implementing NQA-1 requirements in some contractor activities which involved slowing down the mission to address safety issues;
- Using an Operational Risk Management Program for evaluating mission operations;
- The One NNSA initiative has the potential to standardize the expectations and standards across the organization; and
- Some interviewees indicated that their Field Office Management supports decisions that may involve stopping work for a safety issue.
- Some work groups indicated that they do not feel time or schedule pressure.
- Some work groups feel supported by their leadership in making decisions.
- NNSA Senior Leadership did create a chartered Safety Culture Working Group to address organizational issues.
- Interviewees and the Team observed that most NNSA employees are committed to NNSA's mission and believe that they can make a difference to help ensure the safety and security of the nation.

Areas in Need of Attention

- Many interviewees expressed concerns regarding NNSA's Senior Leadership commitment and priority to safety. Examples included:
 - Many interviewees indicated that they did not perceive a priority on safety when Senior Leadership is more focused on the fire drill of the day rather than on a long term strategic commitment to planning for safety and security.
 - Interviewees perceive that there are many threats that NNSA is not prepared for because decision makers believe that 'it can't happen here'.
 - Safety is perceived to be important only when there is an accident or an event.
 - Interviewees described that safety and quality are not as prominent as they should be in the Contract Award Fee and they perceive that NNSA and DOE have been too liberal and highly inconsistent in how fees are awarded.
 - There is a belief that some contractor facility managers are afraid to stop operations for safety issues if the mission might be impacted.
 - Several interviewees indicated that they perceive that some field office management is reluctant to take actions against the contractor so then the contractor is less likely to listen to the NNSA facility representatives. In one example, a contractor discovered that one of its facilities had a material inventory above the threshold for being a nuclear facility. Field Office and Contractor Management are allowing the facility to continue operations before safety documentation upgrades are completed.
 - There is a perception that Senior Leadership often does not respect or value the knowledge and expertise of the staff, e.g., set up ad hoc advisory panels of external scientists during both the Fukushima and Hurricane Sandy responses in

lieu of relying on substantial in-house expertise and experience in emergency response and management.

- Interviewees described several examples of concerns they have about NNSA Senior Leadership:
 - Perception that NNSA Leadership is very reactive to the Defense Nuclear Facilities Safety Board (DNFSB) and will make sudden changes rather than question or say no to the Board;
 - Decision-making used to be balanced across NNSA and now individuals are perceiving an excessively strong Level One management in Washington DC;
 - Perceived lack of Senior Leadership setting priorities, vision, strategy;
 - Most often it appears as if decisions have already been made and that there is no real attempt to listen or engage staff. A top down approach to decisions was used in establishing, APM, NA-00, One NNSA.
- Many interviewees indicated that while the concept is to consider Albuquerque as an extension of Headquarters, without any real leadership there nobody is in charge in managing an unexpected event, e.g. bomb threat, and employees feel disconnected from the organization.
- The lack, and in some cases allocation, of resources was described by many interviewees as significantly impacting their work. Some examples included:
 - The lack of travel funds was often cited by interviewees has impacting the involvement of all NNSA locations in several initiatives especially the One NNSA Team concept.
 - Staff in the procurement office has been reduced, since the elimination of the Albuquerque Service Center, vacancies are not being filled and there are competing priorities with fewer people. In addition, supervisors are pressured into hiring lower grade and less experienced staff to save money.
 - Succession planning is needed across the organization. NNSA is described by interviewees as being short in bench strength, e.g., LAFO and NFO Managers left at the end of last year, NPO doesn't have a permanent deputy, the LAFO Deputy Manager is leaving, NA-00 is acting for NA-2.
- Interviewees indicated that resources are being moved from other offices into NA-10 and NA-00 creating a perception that other efforts are not valuable to the mission.
- The overall results on the Behavioral Anchored Rating Scale for Attention to Safety indicate that approximately 18% of the NNSA individuals that completed this scale had negative perceptions about the value of safety in the organization and an additional 45% of the respondents that completed this scale provided a mid-range score which indicates that they perceive that management reflects a delicate balance of emphasizing safety, while at the same time making it clear that there is a need to keep things on schedule. Among respondents from the various locations across NNSA those in Headquarters located in Germantown had the most negative perceptions about the value of safety in the organization, while over 40% of the respondents in Headquarters located in Albuquerque, and those in the Field Offices of NPO-Y12 and Livermore had positive perceptions about the value of safety. Within NNSA Work Groups those respondents from NA-40 had the most negative perceptions about the value of safety (40%) while those in NA-70 had the most positive (50%).

- Results from the Behavioral Anchored Rating Scale on Resource Allocation indicate that overall only 8% of the NNSA interviewees that completed this scale are positive in their perceptions that employees have sufficient resources to implement corporate goals and that they perceive that the employees understand how these goals relate to their daily activities. Among NNSA Locations only respondents from HQ located in Albuquerque (17%) and Forrestal (9%) had positive perceptions about the allocation of resources. Respondents in the Field Office at Los Alamos had the most negative responses (100%) about resource allocation. Across NNSA Work Groups NA-GC, IM and EA (combined) had the most positive perceptions about the allocation of resources (25%) and respondents in NA-20 had the most negative perceptions (75%).
- Results from the Behavioral Anchored Rating Scale on Time Urgency indicate that overall approximately 42% of NNSA individuals that completed this scale perceive that most tasks are completed on time without compromising safety or quality. Among NNSA Locations respondents to this scale, 69% of those in the Field Office in Nevada had positive perceptions about this behavior, while respondents in the Field Offices in Savannah River, NPO at Pantex, and Kansas City had more negative perceptions.
- Results on the Attention to Safety Scale on the electronic survey were among the lowest scores compared to a database of other responses from DOE organizations, including both federal and contractor respondents at Headquarters and at DOE field locations. The pattern of low scoring responses by NNSA indicates that NNSA survey respondents had a more negative perception of the value the organization places on various behaviors which are used to promote safety.

1.5.2 **Problem Identification and Resolution**

Issues potentially impacting safety are promptly identified, fully evaluated, and promptly addressed and corrected commensurate with their significance.

Positive Observations

- Multiple mechanisms for identifying problems were described by interviewees including:
 - All hands meetings;
 - Ombudsman;
 - Senior Management, open door policy;
 - Human Resources Manager;
 - Supervision;
 - Federal Employee Occupational Safety and Health Program;
 - Employee Concerns Program
 - Differing Professional Opinion process
 - Whistleblower process;
 - E-Pegasus;
 - IG Hotline
 - Weekly reports;
 - Contractor Performance Evaluation Process (CPEP);
 - Email, etc.

- Interviewees indicated that some of the NNSA Offices have their own processes to facilitate problem identification including, An office in NA-70 has an anonymous suggestion box, Livermore Field Office has a Quality Management Council, Kansas City Field Office has White Board Meetings and Sandia Field Office has Forecast Meetings where risks in safety and security are discussed.
- The process to evaluate nuclear explosive safety, including among contractors, was described to be approved at the Senior Leadership level in Defense Programs and the Nuclear Production Office.
- NNSA Senior Leadership's decision to conduct this Independent/Self-Assessment Assessment of Organizational and Safety Culture across the entire NNSA Federal population, is a proactive step to identify those areas where there are gaps that should be addressed and corrected.

Areas in Need of Attention

- Interviewees identified some issues that might inhibit the identification of problems or concerns. These included perceptions related to:
 - Fear of reprisal and retaliation;
 - Lack of recognition for expertise;
 - Management disapproves of raising problems;
 - Hard to remain anonymous;
 - If you raise problems you may be labeled as a troublemaker;
 - If you raise a problem you better know how to solve it;
 - Uncertainty about how the message will be received;
 - Management often keeps to themselves;
 - Geographical barriers may be inhibiting;
 - Political influences;
 - Management and supervision are too busy; and
 - There is no real electronic, formal reporting system for NNSA employees to use to identify problems or concerns of all types. While some systems exist, E-Pegasus and CA Web, not all sites have both and interviewees indicated that knowing when and how to use them can be confusing.
- Some interviewees indicated that they know of a few individuals who received negative consequences for using the Differing Professional Opinion (DPO) process.
- There is the perception by many interviewees that NNSA and DOE do not have very good standards or metrics to determine what a problem actually is.
 - There are differences in how risk is considered and what should be reported, the contractors look for residual risk, NNSA's position is for unmitigated risk.
 - There is an NPO level expectation for issues management, but the implementation is very different across the Pantex and Y-12 sites; thresholds for reporting are different and it is also confusing for the contractors.
 - Many Technical Safety Requirements violations are first identified by the field offices even though contractors should be finding them. Interviewees indicated that they believed that some managers are too concerned about the number of violations rather than understanding what the important issues are.

- Some interviewees indicated that they perceive that NNSA/DOE have created an environment where contractors have implemented controls so that the level of occurrence reporting is lower and less financially consequential for managers, e.g., lowering a reactor shutdown point so that a SCRAM, which is a reportable occurrence, would not occur; reducing self-reporting so that the number of infractions is not too high.
- Interviewees described that there is no good process to guide causal analysis across the organization.
- Data from the Behavioral Anchored Rating Scale on Problem Identification and Resolution indicated that overall only 19% of the NNSA interviewee respondents who completed this scale provided a high rating indicating that they perceived that the organization encourages personnel to draw upon knowledge, experience and current information to identify and resolve problems positively. Among respondents across the NNSA Locations who completed this scale those in the Savannah River Field Office (66%) had positive perceptions about the behavior, while those in the Albuquerque Headquarters Office had the most negative perceptions (60%). Among NNSA Work Group respondents to this scale 100% in NA-70 had negative perceptions about problem identification and resolution.

1.5.3 Personal Accountability

All individuals take personal responsibility for safety.

Positive Observations

- Most interviewees indicated that annual performance reviews are conducted.
- Some interviewees described conducting status briefings of their performance to their supervisors.
- Almost all interviewees indicated a strong sense of ownership to the mission and for producing quality products, keeping people safe and secure, and helping people that they work with.
- The Livermore Field Office safety basis team reports to the Assistant Manager for Defense Programs. Concerns by the DNFSB about potential conflicts between program work and safety are being monitored by the field office and it's Operations Team. An example of success with the process was a recent facility glove box line readiness assessment for the flow down of hazards to controls when a proposed control set was not deemed conservative enough. The Livermore Field Office held the position that the contractor should emphasize less reliance on alarms and more reliance on engineered systems.

Areas in Need of Attention

- Many interviewees indicated that the new reorganization within NNSA has created a lot of confusion in the roles and responsibilities of the various offices.
 - Roles and responsibilities are not clearly defined for the field and among Headquarters Offices;
 - There is a strong desire for clear expectations and responsibilities;

- Interviewees indicated that federal responsibilities defined in directives are not consistent with management expectations of responsibilities and employees are getting mixed messages;
- NA-00 is perceived to have created unclear authorities for field office managers, conflicting information on who manages the program direction budget, different expectations and different roles and responsibilities between NA-00, Mission Support Offices and field offices;
- The transition between some offices and NA-00 is described by interviewees as problematic, e.g. NA-70 only deals with the field now during assessments because the mission part of the work went to NA-00 but they don't have enough resources; there was a lack of involvement by NA-00 in some issues because other NNSA organizations did not know that NA-00 should be involved.
- Many interviewees expressed a concern over the blurring of roles and responsibilities with NA-00, NA-SH, NA-70 and HSS. Field office employees responsible for oversight are being diverted from their oversight duties because of multiple and often redundant requests from these offices.
- The joint responsibility for safety by NA-SH along with NA-00 is described by most interviewees as confusing. In a recent review of a waste storage facility multiple players in the safety area were involved, HSS owns the governing standard, NA-SH has the corporate piece, NA-00 is involved in the implementation and NA-10 was also involved from the program side.
- There are differing perceptions expressed between Headquarters and the field on the role of the Field Office Manager, between NA-10 and NA-20 on priorities. Headquarters needs to decide priorities and establish integration across NNSA.
- Some unclear responsibilities are contributing to a 'not my job' attitude.
- NPO is 9 months old and still trying to work out roles and responsibilities. Interviewees describe silos between the two NPO locations.
- There is the perception among some supervision that the field offices have lost more local control in the re-organization and that Headquarters is getting involved in more and more things, e.g., immediate supervisors at NPO were not consulted on whether their employees should be approved for the buyout and they were not part of the process. Major talent without an opportunity for succession planning was lost from NPO.
- Data on the Behavioral Anchored Rating Scale for Performance Quality indicates that overall about 83% of the NNSA interviewees who completed this scale are either negative or uncertain in their perceptions that personnel take personal responsibility for their actions and the consequences of the actions. Perceptions of Performance Quality across NNSA Locations were similarly low, with the NPO Y-12 Field Office (68%) having the most negative perceptions. Among NNSA Work Groups 100% of the NA-70 respondents to this scale perceived the behavior negatively.
- Accountability is perceived by many interviewees to be an issue at NNSA. Some examples provided include:
 - A number of interviewees felt that the reorganization of NNSA was not well planned and has resulted in significant organizational integration and coordination issues.

- Perception exists that poor performers are not held accountable and that there needs to be a greater link of authority to responsibility and accountability.
 - Many interviewees indicated that the performance appraisal process needs to be addressed. It is not well understood by many employees. Individuals indicated that many supervisors do not provide informal feedback to employees.
 - Several interviewees expressed the idea that the incentives for performance in NNSA are wrong. Positive behaviors, such as telling the truth, doing smart capable things, or saving costs are not rewarded. Additionally there are no non-monetary rewards.
 - Interviewees indicated that there are disconnects within the NNSA organization on how to evaluate contractor performance often resulting in inconsistent products and making it difficult for the contractor to be successful.
 - NNSA's relationship with its contractors is perceived to be different from other government agencies. The contractor is very influential over NNSA. Recently a Congressional Committee chartered to review NNSA included 7 current or former NNSA contractors out of the 12 members.
 - The very low response rate to the survey that was obtained as part of this assessment may also be an example of how individuals are not held accountable to expectations and standards. It may reflect the inability of NNSA Senior Leadership to align its employees to what it communicates as important for the organization.
- Data on the Behavioral Anchored Rating Scale for Roles and Responsibilities indicated that overall 78% of NNSA interviewees who completed this scale provided a low or mid-rating indicating a perception that employees do not or may not understand their duties, know who to go to when a task needs to be done or clearly understand their role in completing cooperative activities. Across NNSA Locations respondents from the NPO Y-12 location who completed this scale had the most negative perceptions about roles and responsibilities across the organization. Among NNSA Work Groups 50% of the NA-SH respondents to this scale had positive perceptions about roles and responsibilities.
 - Scores across NNSA on the Commitment Scale from the electronic survey were among the lowest in comparison to similar organizations that took the same survey. Statistically significant differences were obtained between NNSA Locations with the Kansas City and Savannah River Field Offices having significantly more positive perceptions about commitment to the organization than survey respondents in the Los Alamos, NPO Pantex, NPO Y-12 Field Offices and the Prefer Not to Respond group. Among NA Work Groups survey respondents in the NA-80 Group had statistically significant more positive perceptions about commitment to the organization than respondents in NA-15, NA-40, NA-70, NA-APM, NA-SH, and the Prefer Not to Respond Work Groups. Among tenure groups survey respondents in the Less than 3 Years Group had statistically significant more positive perceptions about commitment to the organization than any of the other tenure groups.

1.5.4 Work Processes

The process of planning and controlling work activities is implemented so that safety is maintained.

Positive Observations

- Some interviewees perceive that coordination of work and communication is better in NNSA than other parts of DOE and that the organization is working on improving it.
- There is a perception by management that field office management is tightly integrated.
- In general, field office interviewees indicated that they perceive that the Field Office Assistant Managers work well together.
- NA-APM interviews indicated that they believe that contracting source documents are good.
- Interviewees indicated that DOE and government wide acquisition regulations exist and that there are DOE and NNSA guides. Interviewees also describe a mature purchasing system.

Areas in Need of Attention

- Interviewees described several barriers within NNSA to getting work done. Examples included:
 - Many individuals indicated that NNSA is too compartmentalized and that communication and coordination across offices is often only accomplished through informal mechanisms.
 - Some interviewees indicated that orders are written with great flexibility because the sites are so different and then implementation is inconsistent between the offices.
 - There is a recognized need for consistent implementation of processes, however even with the One NNSA initiative things are still being done differently across the organization e.g., teleworking.
 - Reliance on geographically distant offices impacts schedule and goals.
 - The Concurrence process changes all the time and there is no formalized template on who must concur.
 - New processes are often quickly developed in reaction to stakeholders without thoroughly thinking them through.
 - Different priorities and objectives across the organization can make work coordination difficult.
 - The new mission and scope of new and reorganized offices make it difficult to understand where coordination is required. In addition with a new organizational structure it is often hard to find who is responsible.
 - Many interviewees indicated that there is a need for an integrated information system. Currently NNSA is working with old costly systems like the HQ and Albuquerque Complex intranets that don't communicate with each other.
 - Given the number of stakeholders in NNSA with differing and at times competing goals, a perception exists that attempts made to address the various stakeholder interests can be an impediment to getting work done..
- Many interviewees expressed the need to have more effective formalization across NNSA. Examples included:
 - A lot of policy making is done with memos.

- The need for more formalized systems should be realized with standard operating procedures.
- The direction on how to do memos and concurrences is not formalized.
- When processes are changed work becomes laborious, e.g., a two sentence memo took two months to get out.
- The organization is too risk averse to make mistakes and so people don't make decisions but rather wait for decisions to be made for them.
- There are excessive issues for reporting, e.g., weekly reports, calendars, constant updates with specific format requirements; information repeated in many forums.
- Interviewees from several field offices indicated that there is a perception of an attitude at Headquarters that the field is too close to the contractor and that the field cannot be trusted.
- NA-00 mandated generic specific performance objectives (SPOs) for NA-00 employees' performance appraisal plans. The requirement for employees to have input to the appraisal process was ignored. Employees do not have control over some of the elements in the SPOs but will be evaluated on them anyway.
- Interviewees indicated that there is an SPO requiring employees to conduct oversight which appears to be in conflict with another SPO requiring the same employees to support the mission.
- Interviewees perceive that differences across the DOE Complex in policies and processes are hurting performance, e.g., differences between NNSA and DOE Security policies affected the Y-12 event.
- Data on the Behavioral Anchored Rating Scale for Formalization indicates that overall 83% of the NNSA Respondents to this scale have a negative or neutral perception of the extent to which there are well-identified rules, procedures, and/or standardized methods for routine activities as well as unusual occurrences. Among NNSA Locations respondents from Headquarters stationed in Germantown who completed this scale, 67% had negative or neutral perceptions about formalization. Across NNSA Work Groups respondents in NA-40 who completed this scale had the most negative perceptions about formalization.
- Data on the Behavioral Anchored Rating Scale for Coordination of Work indicates that overall 78% of the NNSA Respondents to this scale have a negative or neutral perception of the planning, integration, and implementation of work activities of individuals and groups. Among NNSA Locations respondents from the NPO Y-12 and Pantex Field Office had the most negative perceptions about the coordination of work. Respondents in the Nevada Field Office had the most positive perceptions. Across the respondents in the NNSA work groups who completed this scale NA-20 individuals had the most negative perceptions about coordination of work.
- Data from the Coordination of Work Scale on the electronic survey indicated that the overall score for NNSA was the lowest among similar organizations that have taken the same survey. Statistically significant differences were obtained between the NNSA Locations and Employee Categories. Among Locations the Kansas City and Savannah River Field Offices had the most positive perceptions about coordination of work compared to most of the other locations. Among employee categories Headquarters Office Directors and Deputy Directors as well as Other Headquarters Managers and Team Leads had statistically significantly lower perceptions about the coordination of

work than other manager categories. No statistically significant differences were obtained between NNSA Work Groups indicating that all groups had a similarly low perception of the coordination of work.

1.5.5 Continuous Learning

Opportunities to learn about ways to ensure safety are sought out and implemented.

Positive Observations

- Interviewees indicated that training and details are often encouraged at the Senior Leadership Level, but in reality supervision can't afford to let people go without still doing their regular job.
- Some efforts at organizational learning were described by interviewees. These include:
 - After-Action Reports for Emergency Response activities;
 - Some use of DOE Occurrence Reporting System (ORPS) to search for operational events; and
 - DOE Lessons Learned database on HSS website.
- Interviewees indicated that some of the field sites have attempted to reinforce reporting so that lessons learned can be captured.
- Some informal lessons learned from the Y-12 event were expressed by some interviewees:
 - Have a clear chain of command with lines of responsibility;
 - Performance tests are not being done;
 - There is an overreliance on compensatory measures;
 - Performance reports are not always accurately representing the real situation;
 - Maintenance problems were only known by one element of the organization when others should have also had the information; and
 - Performance is more important than compliance.

Areas in Need of Attention

- Because no formalized process exists to share lessons learned across the NNSA organization, information sharing is dependent on individuals. One example of this is seen in the lack of formal presentations on the lessons learned from the Y-12 event within the NNSA Organization. In addition, interviewees indicated that no training that addresses the event directly has been conducted.
- There is a perception by many interviewees that there is a lack of recognition for organizational development and training at the Senior Leadership level and that NNSA has missed many opportunities in this area. Only recently has a leadership training element been initiated and it is perceived to be limited in scope.
- Interviewees expressed the concern that there is no standard training for emergency management and yet there is a standard qualification. Qualifications are dependent upon who signs off the qualification card and the process is not standardized between the sites.
- Data on the Behavioral Anchored Rating Scale for Organizational Learning indicated that overall 89% of NNSA interviewee respondents provided negative or neutral ratings

suggesting that they do not believe that individuals and groups of employees pay close attention to past behaviors and how they can be improved in the future. They do not believe that information about past activities is necessarily formalized and available for future reference. Among NNSA Locations respondents from the NPO Y-12 and Los Alamos Field Offices had the most negative perceptions about organizational learning. Across NNSA Work Groups respondents from NA-20 who completed this scale had the most negative perceptions about this behavior.

1.5.6 Environment for Raising Concerns

A safety conscious work environment is maintained where personnel feel free to raise safety concerns without the fear of retaliation, intimidation, harassment, or discrimination.

Positive Observations

- Many interviewees indicated that there are multiple mechanisms available to identify concerns, e.g., supervisors, managers, Employee Concerns Program (ECP), Differing Professional Opinion (DPO) process, Human Resources.
- Some management promotes raising issues, encourages collaboration and respects employee opinions.
- Some sites indicated no fear of retaliation in identifying problems.

Areas in Need of Attention

- Many interviewees perceive that this is one of the weakest areas for NNSA. Many indicated they do not perceive that they have avenues that they are comfortable with to voice issues or problems and they hold back on doing so.
- Interviewees indicated that their concerns are often dismissed and they are not sure that confidentiality would be maintained by the chain of command, e.g. an individual questioned the promotion process and it was not held in confidence.
- Several interviewees indicated that they don't know much about Employee Assistance Program or ECP and in some cases where people are aware of ECP they do not feel comfortable to use it.
- Some fear of retaliation was expressed and examples included, people who report concerns are sometimes seen as problems and it does hurt their career, e.g. they may not get assignments that are requested, don't get meaningful work, they feel boxed into a corner, and they may just get blown off.
- An example of a recent Headquarters' action on a contractor award fee/term extension was described as creating a 'chilled environment' at one of the field offices. Headquarters unilaterally raised a rating a field office had recommended for a contractor. No feedback on the rationale for the change was given to the field office staff. The decision was perceived to give the appearance of rewarding poor performance. A senior contractor official had previous close ties to the Acting Administrator and Field Office Manager.
- Some interviewees also provided examples of retaliation against individuals who raised DPOs.

- The low response rate for the survey and low turnout for focus group participation could be indicative of an environment where raising concerns is not viewed as a way of doing business.
- Among NNSA survey respondents, only about 62% agreed with the statement that everyone in the organization is responsible for identifying problems. The NNSA scores on this question were among the lowest for similar organizations that had responded to the same question. No statistically significant differences were obtained on this question between any of the NNSA locations indicating a similarly low perception of this behavior across the organization. Among NNSA Work Groups survey respondents in NA-MB and the Prefer Not to Respond Groups had the lowest perceptions. NNSA Managers across Headquarters and the Field Offices had more positive perceptions than NNSA Non-Managers survey respondents.
- The statement on the electronic survey that management does not tolerate retaliation of any kind for raising concerns was agreed to by 65% of the NNSA survey respondents. Statistically significant differences were obtained between survey respondents across the NNSA Locations with individuals in the Kansas City and NPO Y-12 Field Offices having more positive perceptions about this than most of the other locations. Significant differences were also obtained across the NNSA Work Groups with survey respondents in NA-00, 10, 20 and SH having more positive perceptions about retaliation not being tolerated. NNSA Managers generally had more positive responses to this question than Non-Managers did.
- Among NNSA survey respondents only 22% of employees feel that they can openly challenge decisions made by management. Statistically significant differences were obtained between NNSA Locations with the Kansas City, Livermore, Sandia, and Savannah River Field Offices having more positive responses than most of the other locations. Across NNSA Work Groups the survey respondents in NA-80 had statistically significantly higher responses to this question than other groups. NNSA Managers had significantly more positive responses than Non-Managers did.
- Approximately 25% of NNSA survey respondents believe that constructive criticism is encouraged. Statistically significant differences were obtained between NNSA Locations with survey respondents in the Kansas City, Livermore, Nevada, Sandia and Savannah River Offices having more positive perceptions about this behavior. Across the NNSA Work Groups survey respondents in the NA-80, GC/IM/EA, and SH Groups had significantly more positive scores on this question. Similar to other questions, NNSA Managers had more positive responses than NNSA Non-Managers to this question.
- Approximately 40% of the NNSA survey respondents agreed with the statement that they feel that they can approach the management team with concerns. Statistically significant differences were obtained between NNSA Locations with survey respondents in the Headquarters Germantown location, Kansas City, Livermore, Nevada, Sandia and Savannah River Offices having more positive perceptions about this behavior. Across the NNSA Work Groups survey respondents in the NA-80, GC/IM/EA, and SH Groups had significantly more positive scores on this question. Similar to other questions, NNSA Managers had more positive responses than NNSA Non-Managers to this question.
- Among NNSA survey respondents 35% agreed with the statement related to management wants concerns reported. Statistically significant differences were obtained between NNSA Locations with survey respondents in the Kansas City and Savannah River Offices

having more positive perceptions about this behavior. Across the NNSA Work Groups survey respondents in the NA-80 and SH Groups had significantly more positive scores on this question. Similar to other questions, NNSA Managers had more positive responses than NNSA Non-Managers to this question.

- Approximately 30% of NNSA survey respondents agreed with the statement that concerns raised are addressed. Statistically significant differences were obtained between NNSA Locations with survey respondents in the Kansas City, Livermore, Nevada, Sandia and Savannah River Offices having more positive perceptions about this behavior. Across the NNSA Work Groups survey respondents no statistically significant differences were obtained on this question. Similar to other questions, NNSA Managers had more positive responses than NNSA Non-Managers to this question.

1.5.7 Effective Safety Communication

Communications maintain a focus on safety.

Positive Observations

- Interviewees identified mechanisms for communication in the NNSA Organization
 - Management meetings;
 - Group meetings;
 - All hands meetings;
 - One on one communication;
 - Video conferencing;
 - DOECASTs and NNSACAST;
 - Emails;
 - Open door policy.
- Most interviewees indicated communication with their peers and within their particular groups works well.
- Several interviewees indicated that the Lintgrams were great and looked forward to receiving them.
- Observations by the Team indicated that when meetings occur efforts are made to include all parties regardless of their locations. Most meetings observed did include call in parties from other locations.

Areas in Need of Attention

- Many interviewees indicated that there are issues around the effectiveness of communication in NNSA. Examples included:
 - It is not clear if the intended message ever gets out because individuals are inundated with email and that is the primary mechanism by which information is communicated.
 - There is the perception held by many interviewees that most of the communication they receive is 'fluff' and they do not trust it to accurately represent what is going on. Some individuals share the perception that information is withheld and they are not sure why or if it is intentional.

- Interviewees expressed a desire to communicate better with each other across the organization and break down the compartmentalization of offices.
- Interviewees describe that the amount of time management spends in meetings impedes their ability to effectively share information with their staff.
- Interviewees describe a lot of bureaucracy and formality in communication often making it very cumbersome.
- In some instances interviewees described hearing about significant news from the contractors instead of from their direct management. This sentiment was expressed more predominantly in the field.
- There is the perception that friction between the program offices is impacting communication.
- There is a perception that management is so busy dealing with external matters that they lose focus on internal issues, e.g., some individuals have never met Senior Leadership.
- Some interviewees expressed the desire for Headquarters to be more sensitive to communication about activities that only pertain to Forrestal or Germantown employees and not Albuquerque or the field offices, e.g. cruise on Potomac, picnic in Germantown.
- Senior Leadership from Washington does not always meet with staff when they come to Albuquerque or the field offices.
- Most interviewees described NNSA as very poor when it comes to change management. Examples included:
 - Decisions are often made without communicating to staff and explaining the purpose, e.g., reorganization. Many staff found out after the fact and need more direct communication from Senior Leadership.
 - The Service Center was dissolved over two years ago but DOE/NNSA directives which have not been eliminated or updated still assign responsibilities to the Center.
 - Information flow is perceived to be worse since the Service Center was dissolved.
 - The rollout of NA-00 was perceived to be done poorly. Interviewees indicated that they believe it was not thoroughly thought out and described that they were expected to change offices and functions before the reorganization was officially approved.
 - The One NNSA is perceived by some to be a good idea, but the rollout and implementation have not been effective. Many believe that the initiative is an attempt at a centralized command and perceive that Headquarters is not listening to the sites and that they are being talked at, not to.
 - Lines of communication need improvement, e.g. an individual's new role was discovered from his e-mail signature block, not from an email sent out by NNSA Management.
- Data from the Behavioral Rating Scale on Communication indicated that overall only 23% of the NNSA interviewee respondents who completed that scale had positive perceptions about the exchange of information, both formal and informal, between the different offices in the NNSA Organization, including the top-down and bottom-up communication networks. Among NNSA Locations who responded to this scale the

individuals at Headquarters Germantown location had the least positive perceptions about communication.

- Data from the electronic survey on several of the Communication Scales indicated that NNSA survey respondents had low scores across the database on their opinions about perceived Trust in Communication, perceived Accuracy in Communication and Desire for Interaction compared to similar organizations that responded to the same scales. Statistically significant differences were obtained across NNSA Locations with respondents in the Kansas City and Savannah River Field Offices having the more positive perceptions about communication. Significant differences were also obtained across NNSA Work Groups and NA-80 generally had the most positive perceptions about communication.

1.5.8 Respectful Work Environment

Trust and respect permeate the organization

Positive Observations

- Interviewees indicated that within some offices there is a sense of collaboration and respect for co-workers and they perceive a sense of working together to accomplish the mission.
- Scores obtained on the Cohesion Scale from the electronic survey indicated that some locations across NNSA had significantly more positive perceptions about their day to day work groups than others. Respondents in the Kansas City, Nevada, and Savannah River Field Offices had significantly more positive perceptions about their day to day work groups than other locations. Across NNSA Work Groups survey respondents in NA-80 had significantly more positive perceptions about work group cohesion than other groups.

Areas in Need of Attention

- Many interviewees expressed the perception that staff are undervalued, not well respected and often not asked to help solve problems. When they do participate in activities many individuals indicated that they felt as if management was trying to placate them.
- Some interviewees expressed the perception that field office management often sides with the contractor and not with the federal staff.
- Some interviewees believe that favoritism in the NNSA organization prevents others from performing to their best potential.
- Interviewees indicated that there is no training on how to handle situations when an individual self-reports a mistake and some managers are not able to effectively handle that situation.
- On the Perceived Trust in Communication Scale no significant differences were obtained across NNSA Work Groups yet NNSA as a whole had the lowest scores on this scale across the database of organizations that responded to the same scales. This reflects the lack of freedom employees feel to discuss the problems and difficulties in their jobs with an immediate supervisor without jeopardy. This perception was also reflected in the interviewees and focus groups that the Team conducted.

- Results from the Organizational Culture Scales on the electronic survey indicated that respondents perceived both the Aggressive-Defensive and Passive-Defensive Cultural Styles being valued by NNSA Leadership more than behaviors associated with a Constructive Cultural Style. Behaviors of avoiding responsibility, being powerful and competitive within the organization, dependency and conventionalism were perceived to be valued more than those of being sensitive to the needs of others, being affiliative with members of the organization and being rewarded for achievement and professionalism. Statistically significant differences were obtained between NNSA Locations on these behaviors with the Kansas City and Savannah River Field Offices having more positive perceptions than respondents in the Los Alamos, Oak Ridge and Prefer Not to Respond locations. In addition, statistically significant differences were obtained between NNSA Work Groups with respondents in NA-15, 70, MB and the Prefer Not to Respond Groups have significantly more negative perceptions than those in the NA-1, 00, 20, APM and SH Groups. NNSA Managers had statistically significantly more positive perceptions about the organizational culture than some Non-Managers and those in the Prefer Not to Respond Group.

1.5.9 Questioning Attitude

Individuals avoid complacency and continuously challenge existing conditions and activities in order to identify discrepancies that might result in error or inappropriate action.

Positive Observations

- Some interviewees described being supported to challenge conditions and activities and to raise issues and concerns.

Areas in Need of Attention

- Several interviewees expressed their perception that some of the NNSA contractors do not have and do not promote a questioning attitude within their organizations. Many issues are often not self-identified and must be raised by the federal staff. This may be because the federal staff has discouraged self-reporting through the creation of the CPEP and other initiatives.
- Several interviewees indicated that they believed that NNSA was driven too much by external stakeholders often compromising its role as an oversight organization.
- Several interviewees indicated that a questioning attitude was not encouraged and in fact sometimes discouraged by NNSA Leadership and the perception exists that this attitude is not really appreciated or desired.
- Many interviewees indicated that there is not a good venue available for them to express concerns or raise questions within the NNSA organization.

1.6 Conclusions

The results of this evaluation are presented using the 9 traits recently identified by the U.S. NRC and its stakeholders for evaluating the attributes important for a healthy safety culture. The integration of those results can be formulated into several conclusions for the NNSA, all of which have implications for the support of a healthy organizational culture.

- 1.6.1. The Team recognizes that the NNSA Organization is generally comprised of dedicated and talented professionals that are committed to ensuring that the mission of NNSA is met and that the safety and security of the nation is supported. When the NNSA Organization succeeds in meeting its mission it is because of these individuals and in spite of the bureaucracy and some significant organizational issues.
- 1.6.2. The NNSA Senior Leadership (NA-1 and Deputy and Associate Administrators) chose to make this Organizational Safety Culture Assessment all inclusive of its Federal Employee population. The Team recognizes the significance and commitment of that decision. However, the execution and implementation of that decision was representative of many of the problematic organizational issues that reside within NNSA. The need for better planning and integration across the Offices, more effective communication at all levels of the organization, and the holding of individuals accountable for meeting expectations, all impacted the results of this assessment. Low response rates were obtained on the electronic survey, poor participation occurred in the focus groups, and many participants didn't understand why NNSA was conducting this assessment.
- 1.6.3 There is a lack of trust and respect for NNSA senior leadership by many employees across the organization. Individuals described not feeling valued or respected for their professional expertise and being instructed about what to do by leaders who generally do not understand the various functions that NNSA is responsible for. A lack of engagement by senior leadership of the staff combined with the perception of favoritism for a small group, contributes to the unfavorable perception held by many of the senior leadership team. The behaviors exhibited by senior leadership could be labeled as a 'culture of entitlement' and a 'culture of non-inclusion' for NNSA staff.
- 1.6.4 The NNSA Organization does not effectively manage change. There is no systematic organizational change management process. Several major changes were recently made without a clearly communicated strategy, without the anticipation of the potential consequences of changes in roles and responsibilities, especially in the areas of safety and security, and without the necessary formalization ahead of the change to facilitate an effective transition. All the changes have resulted in frustration among the workforce because of confusion in responsibility, uncertainty in authority, and a questioning of value to the mission.

- 1.6.5 Participants in this assessment clearly indicated that they believe that there are safety conscious work environment issues across the NNSA Organization. This was demonstrated through the results obtained during the interviews and focus group sessions and on the electronic survey, including the high percentage of respondents who chose the Prefer Not to Respond category when answering the survey demographic questions. The poor participation rate for the survey and focus groups, the large number of Hotline inquiries and requests made to the Team, all suggest that within NNSA there is a fear of reprisal for raising potentially negative concerns or issues. These behaviors are also related to the values of the Passive Defensive (self-protecting) and Aggressive Defensive (self-promoting) Cultural Styles that employees perceive are needed in order to succeed, or in some cases to survive, in the NNSA Organization.

1.7 Recommendations

A healthy organizational safety culture is most often found within an aligned organization that has effective processes, and motivated people. The recommendations from this Independent Evaluation of Safety Culture for the NNSA Organization are:

- 1.7.1 The key to ensuring effective organizational culture change is secured through an effective communication process. For the NNSA Organization specific efforts to achieve such a process need to include:
- Some time for the Senior Leadership Team to focus on internal issues. During this time Senior Leaders need to engage in more direct contact with the staff.
 - Individuals from all offices and at different organizational levels need recurring opportunities to engage in a dialogue with the Senior Leadership Team, e.g., adding these individuals to standing committees, participating in decision making opportunities.
 - Senior Leadership should establish formal expectations for communication applicable to themselves, subordinate managers, and non-supervisory employees.
 - The mechanisms for communication going forward must ensure a bottom up communication line that it is not cumbersome, transparent to all, and includes a feedback element.
 - Facilitated focus groups that would include individuals from different offices and organizational levels can be used to further understand many of the organizational differences that were identified during this assessment.
 - Ensuring that the feedback on the results of this assessment is communicated in a timely manner to the entire NNSA Organization, as well as to S-1, would be another positive step in working towards understanding and resolving some of the issues and enhancing the organization's communication process.
- 1.7.2 Any future organizational changes must be managed through a formalized and systematic change management process. Such a process cannot allow changes to occur prior to:
- The identification of how the change supports the mission, vision, values and objectives for the organization;

- An opportunity for engagement with staff to ask questions and provide comments and suggestions;
- The development of a communication strategy to roll out the change;
- The consideration of pilot efforts to evaluate the impact of the change on the organization;
- A self-assessment after the complete implementation of the change to identify any needs for additional changes or modifications.

1.7.3 NNSA Senior Leaders need to gain the trust and respect of all employees in its organization. Specific efforts should include:

- Senior leaders need to carefully consider and then firmly commit to near and long-term actions needed to move away from the perceived “culture of entitlement.” NNSA staff needs to be fully engaged in this process.
- A reporting system for the identification of concerns or issues needs to be available to the NNSA Organization. The system must also allow for the anonymous reporting of concerns so that fears of reprisal will not inhibit the discussion of potentially important issues. Input as to the most effective way to achieve this should be done with the engagement of those who will be the potential users.
- Independent of the reporting system, Senior Leaders should initiate an Employee Concerns Program that can support the NNSA federal employees at the Forrestal and Germantown locations. The presence of ECP in Albuquerque is not sufficient for the over 600 NNSA employees in the Washington DC area. The DOE ECP is not an effective solution.
- Rotational assignments and extended details should be planned and implemented on a much broader scale across the NNSA organization and should include geographic and organizational rotations. These assignments need to include SES individuals as well as GS level and Excepted Service staff. SES rotations may help in providing support to those locations where management vacancies have not been filled or are imminent and will help provide credibility to management’s efforts to have more direct contact and knowledge of all aspects of NNSA’s business.

1.8 References

Haber, S.B. and Barriere, M.T. (1998). “Development of a regulatory organizational and management review method. “ Research Report RSP-0060”, Canadian Nuclear Safety Commission, Research Report, Ottawa, Canada.

Haber, S.B., O’Brien, J.N., Metlay, D.S., and Crouch, D.A. (1991). “Influences of Organizational Factors on Performance Reliability,” NUREG/CR-5538, U.S. Nuclear Regulatory Commission, Washington, D.C.

Institute of Nuclear Power Operations (2004). "INPO Principles for a Strong Nuclear Safety Culture".

International Nuclear Safety Advisory Group, INSAG-15 (2002). "Key Practical Issues in Strengthening Safety Culture", International Atomic Energy Agency, Vienna, Austria.

Nuclear Regulatory Commission (2012), Inspection Manual Chapter 0305 "Operating Reactor Assessment Program", U.S. Nuclear Regulatory Commission, Washington, D.C.

Schein, E.H. (1992). "Organizational Culture and Leadership", Jossey-Bass, San Francisco, CA.