



ADEC Response Exercise Program Improvements Process Survey Results Report

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Prepared for

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ABBREVIATIONS

ADEC	Alaska Department of Environmental Conservation
HSEEP	Homeland Security Exercise Evaluation Program
PRAC	Primary Response Action Contractor
StDev	Standard Deviation

1.0 Survey Purpose and Overview

The Alaska Department of Environmental Conservation is working on improvements to its Response Exercise Program. The goal of the effort is to improve the program to better serve the needs of regulators, regulated operators, spill response organizations, and other stakeholders, while maintaining or improving the state of oil spill response readiness with the State of Alaska.

In accordance with the Stakeholder Involvement Work Plan submitted to the Alaska Department of Environmental Conservation (ADEC) in October 2016, an internet-based survey tool was used to assess stakeholder satisfaction with various components of ADEC's current Response Exercise Program and to gauge stakeholder acceptance on several ideas to improve ADEC's Response Exercise Program. During the registration period, stakeholders were presented a series of statements and asked to agree or disagree with them on a 10-point Likert scale for the purpose of identifying areas of consensus and disagreement. Results were used to identify issues that would be presented in the visioning process to gather additional stakeholder input. This report presents the results of the online survey and a simple analysis of the implications of those results.

2.0 Survey Methodology

The survey was posted online using Google Forms and open to registrants from November 2nd to November 22nd. Stakeholders were asked to identify themselves as a member of one of the following stakeholder groups:

- Crude Oil Facilities – Exploration
- Crude Oil Facilities – Production
- Crude Oil Facilities – Pipelines
- Crude Oil Facilities – Refineries
- Crude Oil Facilities – Terminals
- Crude Oil Facilities – Tank Vessels
- Refined Product Facilities – Tank Farms
- Refined Product Facilities – Pipelines
- Refined Product Facilities – Nontank Vessels
- Refined Product Facilities – Tank Vessels
- Refined Product Facilities – Barges
- Refined Product Facilities – Railroad
- Primary Response Action Contractors
- State and Federal Government
- Tribal Entities
- Communities and Local Government
- Non-Governmental Organization
- Other Potentially Impacted Stakeholder

The following list of statements was included in the survey:

1. The role of ADEC staff during exercises is clear and is helpful to our exercise experience.
2. Participation in response exercises represents a good value (in terms of time and money) for my organization.
3. The ADEC Response Exercise Program helps improve my organization's ability to respond to an oil spill.
4. ADEC's current process for planning exercises is effective.

5. ADEC should develop a guidance document to assist operators in understanding the purpose, expectations, and requirements of the State Response Exercise Program.
6. The purpose of a drill or exercise is to practice, learn, and develop partnerships in advance of an actual oil spill response.
7. The purpose of a drill or exercise is to test the response readiness of a response team.
8. Learning is not failure. An exercise that uncovers deficiencies can still be a success.
9. Many of the exercises that I have attended are too scripted and practiced to be useful for assessing preparedness.
10. Unannounced exercises are useful for testing response readiness and should be utilized more often.
11. In my experience, some exercise objectives are over exercised and some are not exercised enough.
12. A risk based approach should be used to determine exercise requirements.
13. A multi-year exercise scheduling tool should be used to plan exercises.
14. Information about other organizations' exercises is readily available to me.
15. An easily accessible statewide anonymous database of exercise objectives and lessons learned would be a useful tool.
16. A program should be developed to exercise Primary Response Action Contractors (PRACs), separately from Regulated Operators, for implementing response tactics. This would reduce the redundancy inherent in the current system.
17. Please rate your familiarity with Homeland Security Exercise Evaluation Program (HSEEP).
18. I think HSEEP has elements that would improve ADEC's Response Exercise Program.

See Appendix A for a copy of the survey form. Due to the lack of familiarity with HSEEP as demonstrated in the responses to survey statement 17, survey statement 18 was not analyzed.

3.0 Description of Participants

Registrants were broken down into the following stakeholder groups and further into sub-groups. To simplify the analysis, crude and refined oil facility stakeholder groups were addressed collectively. The Tribal, Community and Local Government, Non-governmental Organizations and Other stakeholders were grouped together as well. Table 1 shows the stakeholder groupings and the number of respondents in each.

Table 1. Stakeholder Groupings and Number of Responses for Each.

Stakeholder Group	Stakeholder Sub-Group	# of Responses
Crude Oil Operations	Crude Oil Facilities - Exploration	1
	Crude Oil Facilities - Pipelines	3
	Crude Oil Facilities - Production	10
	Crude Oil Facilities - Refineries	1
	Crude Oil Facilities - Tank Vessels	2
	Crude Oil Facilities - Terminals	2
Primary Response Action Contractors	Primary Response Action Contractors	11
Refined Product Operations	Refined Product Facilities - Nontank Vessels	1
	Refined Product Facilities - Tank Barges	4
	Refined Product Facilities - Tank Farms	9
	Refined Product Facilities - Tank Vessels	5
State and Federal Government	State and Federal Government	28
Others	Tribal Entities	1
	Communities and Local Government	3
	Non-Governmental Organization	6
	Other Potentially Impacted Stakeholder	8

A total of 95 stakeholders registered and completed the online survey. One participant was removed due to anonymous registration details being provided. One company submitted six surveys with identical responses to every question; five of these surveys were omitted from further analysis. Table 2 presents the organizations and number of individuals registered in each of the stakeholder groups.

Table 2. Organizations and Number of Individuals Registered in Each Stakeholder Group.

Crude Oil Facilities (19 Registrants Total)	
Alaska Tanker Company, LLC	ConocoPhillips Alaska
Alyeska Pipeline Service Co.	Eni petroleum
Armstrong Energy, LLC	Eni US Operating Co., Inc.
BlueCrest Alaska Operating LLC	Glacier Oil & Gas Corp.
BP Exploration (Alaska)	Hilcorp Alaska
Brooks Range Petroleum	Petro Star, Inc.
Caelus Energy Alaska	Polar Tankers/ConocoPhillips
Refined Product Facilities (18 Registrants Total)	
Alaska Village Electric Cooperative	Matanuska Electric Association
Bonanza Fuel LLC	NAFCO
Crowley Fuels	Offshore Systems, Inc.
Delta Western, Inc.	Petro Marine Services
Harley Marine Services	Power Systems & Supplies of Alaska
Island Tug and Barge Ltd.	Ruby Marine
Kanaga Environmental Consulting	St. Paul Fuel, LLC
Kirby Offshore Marine, LLC	Vitus Energy
Primary Response Action Contractors (7 Registrants Total)	
Alaska Chadux Corporation	Cook Inlet Spill Prevention & Response, Inc.
Alaska Clean Seas	Southeast Alaska Petroleum Response Organization
Alyeska Pipeline Service Company	
State of Alaska and Federal Government (28 Registrants Total)	
Alaska Department of Environmental Conservation	National Marine Fisheries Service
Alaska Department of Fish and Game	U.S. Coast Guard
Alaska Department of Natural Resources	U.S. Environmental Protection Agency – Region 10
U.S. Bureau of Land Management	U.S. Fish and Wildlife Service
Bureau of Safety and Environmental Enforcement	
Other Stakeholders (21 Registrants Total)	
Alaska Steamship Response	Oil Spill Recovery Institute
Alutiiq Tribe of Old Harbor	Owl Ridge Consultants
Arctic Regulatory Compliance & Technical Oilfield Services, LLC	Prince William Sound Regional Citizens' Advisory Council
City of Adak	Pearson Consulting, LLC
City of Saint Paul	SLR
Cook Inlet Regional Citizens' Advisory Council	The Response Group
Emergency Management Consultants	Trident Seafoods
North Slope Borough	Witt/O'Brien's

4.0 Survey Results

This section provides an overview of responses to the survey questions. The 25th percentile, median (50th percentile), 75th percentile, and standard deviation (to indicate the variability in responses) were calculated for each. Figure 1 shows a quartile plot of responses for each statement. Also called a box and whisker plot, a quartile plot divides the data distribution into quarters. The bottom of the whisker (vertical line) is set at the minimum value and the top indicates the maximum value. The bottom of the box represents the 25th percentile of the data, meaning that 25% of the values in the data are less than this number. The line in the middle of the box is the 50th percentile and the top of the box is the 75th percentile.

Figure 1. Quartile Plot of Survey Responses.

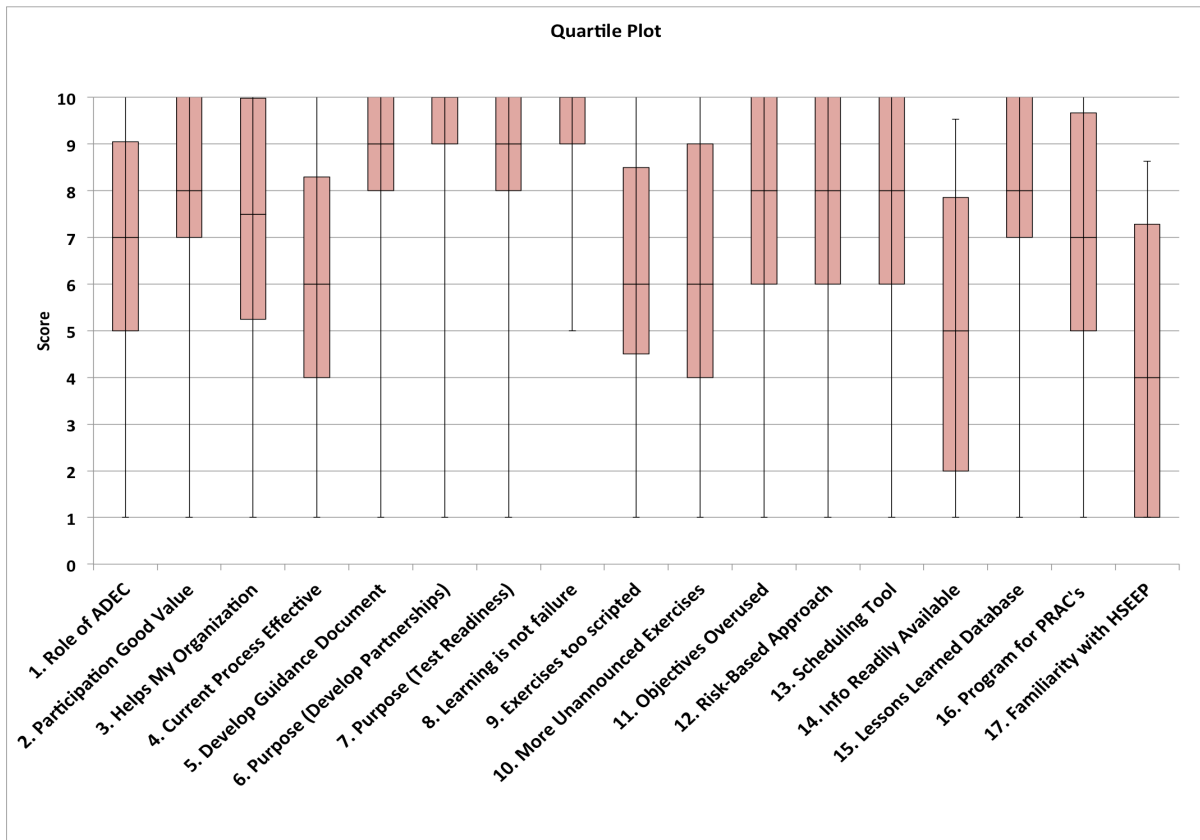


Figure 2 summarizes the responses for each survey statement by stakeholder group. For each statement in the survey, each stakeholder group response was assessed for agreement or disagreement with the statement.

Figure 2. Analysis of Stakeholder Group Responses.

1. The role of ADEC staff during exercises is clear and is helpful to our exercise experience.						
	Frequency Distribution	Median	StDev	Disagree (1-4)	Neutral (5-6)	Agree (7-10)
All		7	2.0	16%	22%	62%
Crude Oil		6.5	2.1	31%	19%	50%
Refined Products		7	2.3	11%	37%	53%
PRAC		5	2.6	43%	14%	43%
State and Federal Govt.		8	1.8	14%	11%	75%
Other		8	1.6	5%	29%	67%

Figure 2 (continued). Analysis of Stakeholder Group Responses.

2. Participation in response exercises represents a good value (in terms of time and money) for my organization.						
	Frequency Distribution	Median	StDev	Disagree (1-4)	Neutral (5-6)	Agree (7-10)
All		8	2.1	5%	16%	78%
Crude Oil		7.5	2.4	6%	31%	63%
Refined Products		7	1.9	5%	11%	84%
PRAC		9	1.8	0%	14%	86%
State and Federal Govt.		9	2.4	11%	4%	86%
Other		8	1.8	0%	29%	71%

Figure 2 (continued). Analysis of Stakeholder Group Responses.

3. The ADEC Response Exercise Program helps improve my organization's ability to respond to an oil spill.						
	Frequency Distribution	Median	StDev	Disagree (1-4)	Neutral (5-6)	Agree (7-10)
All		7.5	2.5	18%	16%	67%
Crude Oil		6	2.9	47%	7%	47%
Refined Products		7	2.4	16%	11%	74%
PRAC		5	3.3	43%	14%	43%
State and Federal Govt.		8.5	2.0	7%	11%	82%
Other		8	1.9	5%	33%	62%

Figure 2 (continued). Analysis of Stakeholder Group Responses.

4. ADEC's current process for planning exercises is effective.

	Frequency Distribution	Median	StDev	Disagree (1-4)	Neutral (5-6)	Agree (7-10)
All		6	2.3	26%	34%	40%
Crude Oil		5	2.3	44%	31%	25%
Refined Products		5	2.5	16%	47%	37%
PRAC		6	2.3	29%	29%	43%
State and Federal Govt.		6	2.1	18%	36%	46%
Other		6	2.4	33%	24%	43%

Figure 2 (continued). Analysis of Stakeholder Group Responses.

5. ADEC should develop a guidance document to assist operators in understanding the purpose, expectations, and requirements of the ADEC Response Exercise Program.						
	Frequency Distribution	Median	StDev	Disagree (1-4)	Neutral (5-6)	Agree (7-10)
All		9	2.6	9%	7%	84%
Crude Oil		8	2.9	13%	13%	73%
Refined Products		9	2.5	5%	16%	79%
PRAC		8	3.7	29%	0%	71%
State and Federal Govt.		10	2.4	7%	0%	93%
Other		10	1.8	5%	5%	90%

Figure 2 (continued). Analysis of Stakeholder Group Responses.

6. The purpose of a drill or exercise is to practice, learn, and develop partnerships in advance of an actual oil spill response.						
	Frequency Distribution	Median	StDev	Disagree (1-4)	Neutral (5-6)	Agree (7-10)
All		10	1.7	2%	7%	91%
Crude Oil		10	1.6	0%	13%	88%
Refined Products		10	1.6	0%	11%	89%
PRAC		10	1.1	0%	0%	100%
State and Federal Govt.		9.5	2.0	7%	0%	93%
Other		10	1.5	0%	10%	90%

Figure 2 (continued). Analysis of Stakeholder Group Responses.

7. The purpose of a drill or exercise is to test the response readiness of a response team.						
	Frequency Distribution	Median	StDev	Disagree (1-4)	Neutral (5-6)	Agree (7-10)
All		9	2.4	9%	7%	85%
Crude Oil		9	2.8	13%	6%	81%
Refined Products		10	3.2	16%	5%	79%
PRAC		6	1.7	14%	43%	43%
State and Federal Govt.		9	2.1	7%	4%	89%
Other		9	0.9	0%	0%	100%

Figure 2 (continued). Analysis of Stakeholder Group Responses.

8. Learning is not failure. An exercise that uncovers deficiencies can still be a success.						
	Frequency Distribution	Median	StDev	Disagree (1-4)	Neutral (5-6)	Agree (7-10)
All		10	1.0	0%	2%	98%
Crude Oil		10	1.4	0%	6%	94%
Refined Products		10	1.2	0%	5%	95%
PRAC		10	0.8	0%	0%	100%
State and Federal Govt.		10	0.8	0%	0%	100%
Other		10	0.7	0%	0%	100%

Figure 2 (continued). Analysis of Stakeholder Group Responses.

9. Many of the drills and exercises that I have attended are too scripted and practiced to be useful for assessing preparedness.						
	Frequency Distribution	Median	StDev	Disagree (1-4)	Neutral (5-6)	Agree (7-10)
All		6	2.5	25%	26%	48%
Crude Oil		4	2.4	63%	19%	19%
Refined Products		6	2.1	16%	53%	32%
PRAC		7	3.3	29%	0%	71%
State and Federal Govt.		7	2.1	11%	29%	61%
Other		7	2.5	24%	14%	62%

Figure 2 (continued). Analysis of Stakeholder Group Responses.

10. Unannounced exercises are useful for testing response readiness and should be utilized more often.						
	Frequency Distribution	Median	StDev	Disagree (1-4)	Neutral (5-6)	Agree (7-10)
All		6	3.0	32%	21%	47%
Crude Oil		3	2.0	75%	19%	6%
Refined Products		5	2.7	26%	53%	21%
PRAC		5	3.4	43%	29%	29%
State and Federal Govt.		9	2.2	11%	4%	86%
Other		7	2.8	29%	14%	57%

Figure 2 (continued). Analysis of Stakeholder Group Responses.

11. In my experience, some exercise objectives are over exercised and some are not exercised enough.						
	Frequency Distribution	Median	StDev	Disagree (1-4)	Neutral (5-6)	Agree (7-10)
All		8	2.2	4%	27%	68%
Crude Oil		5	2.2	19%	56%	25%
Refined Products		8	1.8	0%	26%	74%
PRAC		7	3.0	14%	29%	57%
State and Federal Govt.		8	1.6	0%	21%	79%
Other		9	1.7	0%	14%	86%

Figure 2 (continued). Analysis of Stakeholder Group Responses.

12. A risk based approach should be used to determine exercise requirements.						
	Frequency Distribution	Median	StDev	Disagree (1-4)	Neutral (5-6)	Agree (7-10)
All		8	2.2	7%	25%	68%
Crude Oil		8	2.7	13%	31%	56%
Refined Products		9	1.7	0%	16%	84%
PRAC		7	1.5	0%	29%	71%
State and Federal Govt.		8	2.0	4%	25%	71%
Other		7	2.4	14%	29%	57%

Figure 2 (continued). Analysis of Stakeholder Group Responses.

13. A multi-year exercise scheduling tool should be used to plan exercises.

	Frequency Distribution	Median	StDev	Disagree (1-4)	Neutral (5-6)	Agree(7-10)
All		8	2.4	10%	20%	70%
Crude Oil		7	2.7	19%	25%	56%
Refined Products		8	2.8	11%	21%	68%
PRAC		8	2.8	14%	0%	86%
State and Federal Govt.		8	2.1	7%	18%	75%
Other		8	2.0	5%	24%	71%

Figure 2 (continued). Analysis of Stakeholder Group Responses.

14. Information about other organizations' exercises is readily available to me.						
	Frequency Distribution	Median	StDev	Disagree (1-4)	Neutral (5-6)	Agree(7-10)
All		5	2.9	49%	21%	30%
Crude Oil		5	2.8	44%	31%	25%
Refined Products		4	2.8	53%	26%	21%
PRAC		5	2.9	43%	14%	43%
State and Federal Govt.		6	2.4	32%	29%	39%
Other		2	3.1	76%	0%	24%

Figure 2 (continued). Analysis of Stakeholder Group Responses.

15. An easily accessible statewide anonymous database of exercise lessons learned would be a useful tool.						
	Frequency Distribution	Median	StDev	Disagree (1-4)	Neutral (5-6)	Agree(7-10)
All		8	2.6	12%	11%	77%
Crude Oil		6.5	3.0	25%	25%	50%
Refined Products		9	2.6	11%	11%	79%
PRAC		6	3.2	43%	14%	43%
State and Federal Govt.		8.5	2.1	7%	4%	89%
Other		9	1.4	0%	10%	90%

Figure 2 (continued). Analysis of Stakeholder Group Responses.

16. A program should be developed to exercise Primary Response Action Contractors (PRACS), separately from Regulated Operators, for implementing response tactics. This would reduce the redundancy inherent in the current system.

	Frequency Distribution	Median	StDev	Disagree (1-4)	Neutral (5-6)	Agree(7-10)
All		7	2.7	20%	26%	54%
Crude Oil		5	2.9	44%	31%	25%
Refined Products		8	3.1	16%	16%	68%
PRAC		5	3.2	43%	14%	43%
State and Federal Govt.		6.5	2.0	11%	39%	50%
Other		8	2.1	10%	19%	71%

Figure 2 (continued). Analysis of Stakeholder Group Responses.

17. Please rate your familiarity with Homeland Security Exercise Evaluation Program (HSEEP).						
	Frequency Distribution	Median	StDev	Disagree (1-4)	Neutral (5-6)	Agree(7-10)
All		4	3.3	51%	15%	34%
Crude Oil		5	3.8	44%	13%	44%
Refined Products		2	2.9	68%	16%	16%
PRAC		3	3.0	71%	0%	29%
State and Federal Govt.		3.5	3.4	61%	7%	32%
Other		5	2.7	19%	33%	48%

5.0 Interpretation of Results

5.1 Very High Agreement

The following four statements received responses across all stakeholder categories with a median of 9 or greater indicating very high overall agreement with the statement:

#5 ADEC should develop a guidance document to assist operators in understanding the purpose, expectations, and requirements of the State Response Exercise Program.

#6 The purpose of a drill or exercise is to practice, learn, and develop partnerships in advance of an actual oil spill response.

#7 The purpose of a drill or exercise is to test the response readiness of a response team.

#8 Learning is not failure. An exercise that uncovers deficiencies can still be a success.

There was very little disagreement with the ideas expressed in statements #5, #6, and #8. Statement #7 did receive some disagreement from the PRAC respondents; only 43% agreed with the statement that the purpose of a drill or exercise is to test response readiness.

5.2 General Agreement

The following eight statements received responses across all stakeholder categories with a median of 7 or 8 indicating general overall agreement with the statement:

#1 The role of ADEC staff during exercises is clear and is helpful to our exercise experience.

#2 Participation in response exercises represents a good value (in terms of time and money) for my organization.

#3 The ADEC Response Exercise Program helps improve my organization's ability to respond to an oil spill.

#11 In my experience, some exercise objectives are over exercised and some are not exercised enough.

#12 A risk based approach should be used to determine exercise requirements.

#13 A multi-year exercise scheduling tool should be used to plan exercises.

#15 An easily accessible statewide anonymous database of exercise objectives and lessons learned would be a useful tool.

#16 A program should be developed to exercise Primary Response Action Contractors (PRACs), separately from Regulated Operators, for implementing response tactics. This would reduce the redundancy inherent in the current system.

Statement #2 received very little disagreement overall (5%) indicating that everyone found value in response exercises.

Statements #11 and #12 received some neutral responses, but few disagreements. Statement #11 received 27% neutral responses but only 4% disagreed, indicating that most agreed that some objectives were over exercised. Likewise, statement #12 received 25% neutral responses but only 7% disagreed, indicating that general support of a risk based approach.

Statements #1, #3, #13, #15, and #16 did have significant disagreement from at least one stakeholder group.

- Regarding statement #1, 31% and 43% of the Crude Oil and PRAC respondents disagreed with the statement, indicating that they did not find ADEC's role clear and useful.
- Regarding statement #3, 47% and 43% of the Crude Oil and PRAC respondents disagreed with statement #3, indicating that they did not find ADEC program improved their ability to respond to a spill.
- Regarding statement #13, 19%, 11%, and 14% of the Crude Oil, Refined Products, and PRAC respondents disagreed with the statement indicating that they did not support a multi-year exercise tool.
- Regarding statement #15, 25%, 11%, and 43% of the Crude Oil, Refined Products, and PRAC respondents disagreed with the statement, indicating that they did not support database of lessons learned.
- Regarding statement #16, 44%, 16%, and 43% of the Crude Oil, Refined Products, and PRAC respondents disagreed with the statement, indicating that they did not support a program to exercise PRACs separately from regulated operators.

5.3 Neutral with Mixed Responses

The following five statements received responses across all stakeholder categories with a median of 5 or 6 indicating a neutral response to the statement:

#4 ADEC's current process for planning exercises is effective.

#9 Many of the exercises that I have attended are too scripted and practiced to be useful for assessing preparedness.

#10 Unannounced exercises are useful for testing response readiness and should be utilized more often.

#14 An easily accessible statewide anonymous database of exercise objectives and lessons learned would be a useful tool.

#17 Please rate your familiarity with Homeland Security Exercise Evaluation Program (HSEEP).

Each of these statements received a very broad set of responses from all stakeholder groups, indicating that work is necessary to reach alignment among the stakeholder groups.

6.0 Conclusion

In some statements used for the survey there is a great deal of alignment in stakeholder opinion. In other areas there is a wide variety of opinion. The results of this survey should assist ADEC with understanding the views of the response exercise stakeholders on a variety of related topics and will be useful for designing a visioning session and implementing changes to their response exercise program.

Appendix A – Survey Form

ADEC Exercise Program Improvements
Survey

17. Please rate your familiarity with Homeland Security Exercise Evaluation Program (HSEEP).

	1	2	3	4	5	6	7	8	9	10	
Disagree											Agree

18. I think HSEEP has elements that would improve ADEC's Response Exercise Program.

	1	2	3	4	5	6	7	8	9	10	
Disagree											Agree

Would you be willing to participate in a focus group to help further define ADEC's development of its exercise program? A focus group will involve two meetings, the first about four hours and the second about two hours. You will be able to participate without traveling.

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No