AIR FORCE SPECIALTY CODE 4B051
BIOENVIRONMENTAL ENGINEERING
Occupational and Environmental Health (OEH)
Process Assessment

QUALIFICATION TRAINING PACKAGE

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### TRAINER GUIDANCE

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<td><strong>Prerequisites:</strong></td>
<td>None</td>
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</table>
| **Additional Supporting References:** | - Department of Defense Instruction (DoDI) 6055.05, Enclosure 3, 11 Nov 08.  
- Bioenvironmental Engineering Field Manual, Section 1.0, 30 Apr 2009. |
| **CDC Reference:** | 4B051 |
| **Training Support Material:** | - Industrial work center.  
- Activity assessment data for specified work center.  
- Appropriate compliance assessment checklists for that shop, if applicable. |
| **Specific Techniques:** | Conduct hands-on training and evaluation. |
| **Criterion Objective:** | Given an industrial work center and applicable checklists, perform a routine assessment successfully completing all checklist items with limited trainer assistance. |
| **Notes:** | The details for conducting the task steps can be found in AFMAN 48-146 Chapter 2 and Attachments 2 and 3. |
**TASK STEPS**

1. Perform basic OEH hazard characterization.¹
2. Perform health risk assessment.²
3. Perform a Compliance Assessment (GARRISON ONLY).
4. Communicate assessment results to the workplace.

**LOCAL REQUIREMENTS:**

**NOTES:**

1. Perform basic OEH hazard characterization.
   - Pre-planning activity.
   - Identify process(es).
   - Associate OEH hazards with process(es) or locations.
   - Establish similar exposure groups (SEG).
   - Identify OEH Hazard Controls.

2. Perform Health Risk Assessment
   a. Document exposure through EAP process
      - Select the health effect rating (HER) (aka Severity).
      - Select the exposure rating (ER) (aka Probability).
      - Determine the uncertainty rating (UR).
      - Determine course of action (identify project/special surveillance needs).
TRAINEE REVIEW QUESTIONS

STS Line Item 4.2.2: Perform routine assessments

1. What is the aim of a routine assessment?

2. After the initial step of defining the scope of support and resources required to assess industrial activities, routine assessments continue with what step?

3. Before conducting the opening conference, what must you do to gain a working knowledge of the shop activities, compliance requirements, and health risks?

4. For each hazard, what two factors are combined to determine the uncertainty rating?

5. What would the level of confidence in hazard characterization be if during your routine assessment initial air sampling results were within acceptable limits, but not totally conclusive?
PERFORMANCE CHECKLIST

STS Line Item 4.2.2: Perform routine assessments

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<td>1. Perform basic OEH hazard characterization?</td>
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<td>2. Perform a health risk assessment?</td>
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<td>3. Perform a compliance assessment? (GARRISON ONLY)</td>
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<td>4. Communicate assessment results to the workplace.</td>
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**Did the trainee successfully complete the task?**

<table>
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TRAINEE NAME (PRINT)  

TRAINER NAME (PRINT)
ANSWERS

1. What is the aim of a routine assessment?

A: Routine assessments are designed to be short-duration, and identify/prioritize the need for a more in-depth (special) assessment. The information collected during a routine assessment is used to focus limited resources in a prioritized manner

(Source: AFI 48-145, Occupational and Environmental Health Program).

2. After the initial step of defining the scope of support and resources required to assess industrial activities, routine assessments continue with what step?

A: Basic characterization

(Source: AFI 48-145, Occupational and Environmental Health Program).

3. Before conducting the opening conference, what must you do to gain a working knowledge of the shop activities, compliance requirements, and health risks?

A: Review previous assessments

(Source: AFI 48-145, Occupational and Environmental Health Program).

4. For each hazard, what two factors are combined to determine the uncertainty rating?

A: Confidence in hazard and exposure characterization and confidence in existing controls

(Source: AFMAN 48-146, Occupational and Environmental Health Program Management, para 2.4.7).

5. What would the level of confidence in hazard characterization be if during your routine assessment initial air sampling results were within acceptable limits, but not totally conclusive?

A: Medium

(Source: AFMAN 48-146, Occupational and Environmental Health Program Management, Attachment 2, para A2.1.2.1).
STS Line Item 4.2.4: Investigate occupational illness / injury reports*

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| Training References: | • Air Force Instruction (AFI) 48-145, Occupational and Environmental Health Program, Chapter 4.  
• AFMAN 48-146, Occupational & Environmental Health Program Management, 9 Oct 12, Chapter 5. |
| Additional Supporting References: | • Title 29 CFR 1904: Recording and Reporting Occupational Injuries and Illnesses.  
• Air Force Instruction (AFI) 48-101, Aerospace Medical Operations  
• Air Force Instruction (AFI) 91-301, Air Force Occupational and Environmental Safety, Fire Protection, and Health (AFOSH) Program (2.10.1.8.).  
• Air Force Instruction (AFI) 91-204, Safety Investigations and Reports, 12 Feb14 (1.12./1.13.).  
• Air Force Manual (AFMAN) 91-224, Ground Safety Investigations and Reports (2.3.3./2.3.4./2.4.). |
| CDC Reference: | 4B051 |
| Training Support Material: | Copy of a historical OEH-related illness investigation from the flight’s administrative files. Remove any documents that address findings. |
| Specific Techniques: | Have the trainee replicate the investigation for the OSHA Form 301, Injury and Illness Incident Report, (or equivalent) selected. Compare the trainee’s conclusions to those produced during the initial investigation. |
| Criterion Objective: | Given an occupational illness report, successfully investigate the illness completing all checklist items with limited trainer assistance on only the hardest parts. |
| Notes: | *This QTP is limited to investigating occupational illnesses as occupational injuries would be investigated by Safety. |
## TASK STEPS

1. Identify conditions/circumstances that allegedly caused the OEH-related illness.
2. Characterize the specific OEH threat involved.
3. Identify and evaluate the effectiveness of existing controls.
4. Identify any non-compliance issues.
5. Document occupational illness findings in AFSAS.

## LOCAL REQUIREMENTS:

## NOTES:
### TRAINEE REVIEW QUESTIONS

STS Line Item 4.2.4: Investigate occupational illness / injury reports*

1. What is the first step in conducting an investigation into an OEH-related illness?

2. Once you have properly assessed the circumstances surrounding the incident, what is the next step in conducting an OEH-related illness investigation?

3. After you have successfully identified and evaluated the effectiveness of existing controls, what is the next step in the OEH-related investigation process?

4. What is the final step in the OEH-related illness investigation process?
### PERFORMANCE CHECKLIST

**STS Line Item 4.2.4: Investigate occupational illness / injury reports**

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<td>5. Document occupational illness findings in AFSAS?</td>
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**TRAINEE NAME (PRINT)**

**TRAINER NAME (PRINT)**
ANSWERS

1. What is the first step in conducting an investigation into an OEH-related illness?

   A: Identify the conditions/circumstances that allegedly caused the OEH-related illness.
   
   (Source: Career Development Course 4B051)

2. Once you have properly assessed the circumstances surrounding the incident, what is the next step in conducting an OEH-related illness investigation?

   A: Evaluate the effectiveness of controls.
   
   (Source: Career Development Course 4B051)

3. After you have successfully identified and evaluated the effectiveness of existing controls, what is the next step in the OEH-related investigation process?

   A: Identify any non-compliance factors.
   
   (Source: Career Development Course 4B051)

4. What is the final step in the OEH-related illness investigation process?

   
   (Source: Career Development Course 4B051)
## STS Line Item 4.2.5: Conduct pregnancy profile evaluations

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<td>Training References:</td>
<td>4B051, Volume 2, Unit 2.</td>
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| Additional Supporting References: | AFI 44–102, Medical Care Management  
AFI 10-203, Duty Limiting Conditions |
| CDC Reference:    | 4B051 |
| Training Support Material: | Copy of a historical pregnancy profile investigation from the flight’s administrative files. Remove any documents that address personal information. |
| Specific Techniques: | Have the trainee replicate the investigation for the pregnancy profile selected. Compare the trainee’s conclusions to those produced during the initial investigation. |
| Criterion Objective: | Given an pregnancy report, successfully investigate the concerns and make recommendations for pregnancy with limited trainer assistance on only the hardest parts. |
| Notes:            |     |
TASK STEPS

1. Verify job description with the worker and worker’s supervisor.¹
2. Review the workplace assessment/exposure data (if available).
3. Determine if there are any previously measured or unmeasured exposures that could apply to the pregnant worker.
4. Note all known or suspected reproductive hazards.²
5. Identify chemical, physical, radiological, and biological data.³
6. List all of the PPE that is available and used to execute assigned duties.
7. Document the facts you observe during your evaluation.
8. Generate a letter listing potential hazards in worker’s workplace to be given to the worker’s primary care manager (PCM).⁴

LOCAL REQUIREMENTS:

NOTES:

1. Due to Health Insurance Portability and Accountability Act (HIPAA) regulations, do not reveal to the supervisor that the worker is pregnant.
2. Compare the worker’s exposures to various references and identify all teratogens, mutagens, and carcinogens.
3. Be sure to include heat stress, noise, and vibration data. Additionally, specify whether the hazards are based on human or animal studies.
4. The primary care manager (PCM) will determine the worker’s limitations to be included in the profile.
TRAINEE REVIEW QUESTIONS

STS Line Item 4.2.5: Conduct pregnancy profile evaluations

1. What is the BE role in pregnancy profile evaluations?

2. What is the purpose for conducting a pregnancy profile evaluation?

3. Who makes recommendations for workers to be removed from specific duties?
PERFORMANCE CHECKLIST

STS Line Item 4.2.5: Conduct pregnancy profile evaluations

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Did the trainee successfully complete the task?

TRAINER NAME (PRINT)  TRAINEE NAME (PRINT)
ANSWERS

1. What is the BE role in pregnancy profile evaluations?

   A: When conducting your evaluation it is not your responsibility to recommend that an individual be removed from performing any of their duties.

   (Source: Career Development Course 4B051)

2. What is the purpose for conducting a pregnancy profile evaluation?

   A: Pregnant worker evaluations are designed to protect the reproductive health of AF members from occupational exposures to chemical, biological, radiological, or physical substances. This includes any known or suspected substances capable of posing a risk to human reproduction and to identify potential reproductive and developmental hazards.

   (Source: Career Development Course 4B051)

3. Who makes recommendations for workers to be removed from specific duties?

   A: Health Care Provider

   (Source: Career Development Course 4B051)