**Activity Hazard Analysis (AHA)** 

|  | THE CIVILY I  | LALL  | a ranaly br  | D (TATA                        | <u> </u>        |                |                 |             |
|--|---|---|--|--------------------------------|-----------------|----------------|-----------------|-------------|
| Activity/Work Task: Scaffolding Erection   |   | Overall Risk Assessment Code (RAC) (Use highest code)           |  |                                |                 |                | М               |             |
| Project Location: 1010 W. Snow Blind St  | treet, Ft. Nowhere, Alaska  |   | Risk As  | ssessmei                       | nt Code         | (RAC) I        | Matrix          | 1           |
| Contract Number: W921CM-09-M0001   |   |   | )  |                                |                 | Probabi        | lity            |             |
| Date Prepared:   |   |   | Severity   | Frequent                       | Likely          | Occasion       | al Seldom       | Unlikely    |
| Propared by (Name/Title): Someone Ele  | a SO Specialist   | С   | atastrophic  | E                              | Е               |                |                 | M           |
| epared by (Name/Title): Someone Else, SO Specialist  |   |   | Critical   | E                              | Н               | Н              | M               | L           |
| Reviewed by (Name/Title): Super Safetyman/SOH Manager  Notes: (Field Notes, Review Comments, etc.) |   |   | Marginal   | Н                              | M               | M              | L               | L           |
|  |   |   | Negligible   | M                              | L               | L              | L               | L           |
| totes. (Field Notes, Neview Comments, etc.)  |   | Step 1: Rev   | riew each "Hazard" with                                | identified safety '            | "Controls" a    | nd determine R | AC (See above)  |             |
| Crane set-up and use are on a separate AHA   | <b>\.</b>   |   | y" is the likelihood to cau                            |                                |                 | ccident and    | RAC             | Chart       |
|  |   |   | s: Frequent, Likely, Occas<br>is the outcome/degree if |                                |                 | dent did       | E = Extremely   |             |
|  |   | occur and id  | dentified as: Catastrophic                             | c, Critical, Margin            | al, or Negligib | le             | H = High Risk   | Ingii itiak |
|  |   | Step 2: Ide   | ntify the RAC (Probability                             | y/Severity) as E, I            | H, M, or L for  | each           | M = Moderate    | Risk        |
| lah Ctana  | Hamanda   | "Hazard" on   | AHA. Annotate the ove                                  |                                |                 | AHA.           | L = Low Risk    | DA          |
| Job Steps General Safety Requirements all Steps  | Hazards   | 4b  | Minimum Davaan   |                                | Controls        | -4 D=          |                 | RA          |
| Serieral Salety Requirements all Steps   | Exposure to Cold or Hot Weather  Dehydration  **Add additional potential hazards for general on site safety |   | Minimum Person <ul> <li>Long Pant</li> </ul>           |                                | Equipmen        | it Diess.      |                 | -           |
|  |   |   | Shirts with Sleeves                                    |                                |                 |                |                 |             |
|  |   |   | <ul> <li>Hardhat</li> </ul>                            |                                |                 |                |                 |             |
|  |   |   | - Carety Grioco (Green Composite 100 1 Teleffed)       |                                |                 |                |                 |             |
|  | requirements. **  | <ul> <li>Safety Glasses (Potential Eye Hazard Areas)</li> </ul> |  |                                |                 |                |                 |             |
|  |   |   | Weather:   |                                |                 |                |                 |             |
|  | The above hazards are no  |   | Weather:   |                                |                 |                |                 |             |
|  | inclusive and the Site Safe   |   |  |                                |                 |                |                 |             |
|  | Health Officer including the Assurance Representative   |   | (List specific clot                                    |                                | to Compa        | ıny quick sl   | neet, SOPs,     |             |
|  | shall review the AHAs   | = (WAIN)  | plan, etc. for spe                                     |                                |                 |                |                 |             |
|  |   |   | Sun block     Lin bolm                                 |                                |                 |                |                 |             |
|  |   |   | Lip balm   |                                |                 |                |                 |             |
|  |   |   | Dehydration:   |                                |                 |                |                 |             |
|  |   |   |  |                                |                 |                |                 |             |
|  |   |   |  | east 1/2 liter of v            |                 |                |                 |             |
|  |   |   |  | company quicles heat stress si |                 |                | c. for specific |             |
|  |   |   | details on   | neat stress st                 | gns and Sy      | mptoms.        |                 |             |
|  |   |   |  |                                |                 |                |                 |             |
|  |   |   |  |                                |                 |                |                 |             |
|  |   |   | Ĭ  |                                |                 |                |                 |             |

| Job Steps | Hazards   | Controls   | RAC |
|-----------|---|--|-----|
| 1 Set-Up  | Back Strain from uploading or                           | 1a. Utilize proper lifting techniques.   |     |
|           | moving scaffold components.                             | 1b. Size up load before lifting.   |     |
|           |   | 1c. Ask for help when lifting heavy items more than 50 lbs.  | L   |
|           | 2. Lacerations on hands                                 | 2. Wear leather gloves.  |     |
|           | Scaffold failure due to damaged scaffolding components. | 3a. <b>INSPECT</b> all scaffolding components defects or damage such as cracks, excessive rust, metal fatigue, unauthorized repairs, bent tubing         | L   |
|           | Scarrolaing components.                                 | or frame, etc.   | L   |
|           |   | • Frames   | _   |
|           |   | Tubing   |     |
|           |   | Base Plates  |     |
|           |   | Locking Pins   |     |
|           |   | Access Ladder  |     |
|           |   | Planking (Wood or Metal)   |     |
|           |   | Cross Braces   |     |
|           |   | 3b. <b>REMOVE</b> damaged or defective scaffold components immediately. 3c. Attach tag or label " <b>DO NOT USE</b> " on scaffold component.             |     |
|           | 4. Struck by mechanized equipment.                      | 4a. <b>ALWAYS</b> maintain eye contact with operator of equipment.   |     |
|           | **See above "Notes box"**                               | <ul><li>4b. <b>NEVER</b> stand behind (Blind Spots) equipment.</li><li>4c. <b>NEVER</b> stand near unloading or moving of scaffold components.</li></ul> | М   |
|           |   | 4d. ONLY qualified operators shall operate equipment.  | IVI |
|           |   | 40. ONET qualified operators strait operate equipment.   |     |
|           | 5. Loss of load.  | 5a. Secure loads from displacement with ropes, cables, chains, etc. before movement.   |     |
|           |   | 5b. Ensure load to be lifted is secured, balanced, etc.  |     |
|           |   | 5c. Keep hands, fingers, or other body parts away from pinch points.   | M   |
|           | 6. Stuck by suspended loads or material.                | 6a. <b>NEVER</b> stand underneath suspended loads.   |     |
|           |   | 6b. Use taglines to control loads when elevated.   |     |
|           | 7. 51. (1.01.01.01.01.01.01.01.01.01.01.01.01.01        | 7a. Check above for overhead power lines.  | L   |
|           | 7. Electrical Shock                                     | 7b. <b>NEVER</b> erect scaffolding within 10 ft (3 m) of overhead power lines.   |     |
|           |   | Refer to EM 385-1-1, Table 11-1 for Minimum Clearance from   |     |
|           |   | Energized Overhead Electrical Lines  | M   |
|           |   | 7c. <b>NEVER</b> string or hang temporary power cords, wires, etc. on metal scaffolding. <b>Consult with Safety Officer.</b>                             |     |
|           |   | 8a. Inspect ground conditions (level and firm).  |     |
|           | 8. Scaffold failure due to improper                     | 8b. Stable base is necessary for proper scaffold assembly.   |     |
|           | set-up  | 8c. Scaffold shall be tied into structure when the scaffold height   | M   |
|           |   | exceeds four times the minimum scaffold base dimension.  |     |
|           |   |  |     |

| Job Steps                  | Hazards                      | Controls   | RAC |
|----------------------------|------------------------------|--|-----|
| 2. Assembly of Scaffolding | 1 Fall from Elevated Heights | <ul> <li>1a. 100 percent fall protection required during assembly.</li> <li>1b. Personnel shall not be exposed to unprotected sides or falls greater than 6 ft (1.8 m).</li> <li>1c. Scaffolding shall not exceed 14 inches (35.5 cm) from the planking to the face of the building or structure.</li> <li>1d. Scaffolding more than 14 inches (35.5 cm) from the planking to the face of the building or structure shall be guardrails and/or the use of personal fall protection.</li> <li>1e. Personnel shall be tied off to a vertical lifeline with a rope grab during assembly of scaffolding.</li> <li>1f. Vertical lifeline shall be secured to an anchor point of at least 5,000 lbs (2,267.9 kg) per individual.</li> <li>Develop a site specific Fall Protection Plan IAW EM 385-1-1, para 21.C.01 and refer to EM 385-1-1, Section 21.</li> </ul>  | M   |
|                            | 2. Scaffold Failure          | 2a. See diagram below and refer EM 385-1-1, Section 22 for specific requirements (i.e., toe boards, guard rails, safe access, etc.) 2b. Scaffolding shall be assembled on mud sills and base plates. 2c. Mud sills shall be at least 2 times the size of the base plates to disperse total weight of scaffolding. 2d. Scaffolding shall be plumb and level. 2e. Working levels shall be fully decked and/or planked. 2f. Planking shall extend over the end supports not less than 6 in (30.4 cm), 2g. Planking shall be secured, supported, or braced to prevent excessive spring or deflection and secured to prevent loosening, tipping, or displacement. Use of tie wire, cleats, etc. are options. 2h. Planking shall overlapped at least 12 inches (30.4 cm) or secured from movement. 2i. Scaffold shall be capable of supporting without failure at least 4 times the maximum anticipated loads. 2j. Scaffolding shall be all required cross, horizontal, or diagonal braces to secure vertical members laterally. 2k. Scaffolding shall be rigid. | M   |
|                            | 3. Back Strain               | 3a. Utilize proper lifting techniques. 3b. Size up load before lifting. 3c. Ask for help when lifting heavy items more than 50 lbs.  | L   |
|                            | 4. Lacerations on hands      | 4. Wear leather gloves.  | L   |

| Job Steps                            | Hazards                  | Controls  | RAC |
|--------------------------------------|--------------------------|---|-----|
| 2. Assembly of Scaffolding (Diagram) |                          | top rail  rnid rail  toe board  vertical bracing  frame coupler  base plate with ecrew jack   | M   |
| 3. Use of Scaffolding                | 1. Scaffold Failure      | <ul> <li>1a. DO NOT overload more than 4 times the maximum load rating.</li> <li>1b. DO NOT attached hoists or other material lifting devices without Safety Officer approval.</li> <li>1c. Scaffolding shall be tied into building whenever height of the scaffold exceeds 4 times the minimal base. Refer to EM 385-1-1, para 22.B.09 for additional guidance.</li> <li>1d. Scaffold usage shall cease during high winds or severe inclement weather conditions.</li> </ul>   | М   |
|                                      | 2. Falls from Heights    | <ul> <li>2a. Guardrails shall be used as primary fall protection. Guard rails shall installed IAW EM 385-1-1, para 21.B.02.</li> <li>2b. Securing of personal fall protection devices to scaffolding is prohibited.</li> <li>2c. Personnel shall have fall protection whenever above 6 ft (1.8 m).</li> <li>2d. Climbing of braces or cross bracing is prohibited.</li> <li>2e. Safe access (ladder) shall be provided.</li> <li>2f. Personnel shall not stand on mid rails.</li> <li>2g. Ladders shall extend at least 3 ft (0.9 m) past the work area.</li> </ul> | М   |
|                                      | 3. Slips, Trips, or Fall | 3. Walking surfaces on and around scaffolding shall be clear of debris.   | L   |

| Job Steps                       | Hazards                      | Controls   | RAC |
|---------------------------------|------------------------------|--|-----|
| 3. Use of Scaffolding           |                              | Scaffold inspection Checklist    safety headwear   | M   |
|                                 |                              | top rail mid rail toeboard lanyard ladder (access) ladder  |     |
|                                 |                              | end frame coupler safety footwear baseplate with screw jack secured to mudell  |     |
|                                 |                              | Frame Scaffold   |     |
|                                 |                              | The scaffold checklist is not all inclusive of the safety requirements for the assembly, use, and disassembly of scaffolding. Competent Person onsite for work platform safety shall review EM 385-1-1 Safety and Health Requirements Manual, Host Nation safety laws, contract specifications, manufacture specifications, etc. as additional guidance or information for work platform safety.                             |     |
| 4. Disassembling of Scaffolding | 1 Fall from Elevated Heights | <ul> <li>1a. 100 percent fall protection required during disassembly.</li> <li>1b. Personnel shall not be exposed to unprotected sides or falls greater than 6 ft (1.8 m).</li> <li>1c. Personnel shall be tied off to a vertical lifeline with a rope grab during assembly of scaffolding.</li> <li>1d. Vertical lifeline shall be secured to an anchor point of at least 5,000 lbs (2,267.9 kg) per individual.</li> </ul> | M   |
|                                 |                              | Develop a site specific Fall Protection Plan IAW EM 385-1-1, para 21.C.01 and refer to EM 385-1-1, Section 21.   |     |

| Job Steps   | Hazards  |  | Controls   | RAC |
|---|--|--|--|-----|
| 4. Disassembling of Scaffolding   | 2. Back Strain   | 2a. Utilize proper l<br>2b. Size up load be<br>2c. Ask for help wh |  | L   |
|   | 3. Lacerations on hands  | 3. Wear leather glo  | oves.  | L   |
| Equipment to be Used  | Training Requiremer Qualified Persor   |  | Inspection Requirements  |     |
| Scaffold components   | Competent/Qualified Perso  |  | Inspect scaffold components prior to use   |     |
| Hammers Mud sills Full body harness Lanyard Lifeline Fall protection anchor points Float Crane Electric Hand Tools (Battery type) Portable Generator 5 Ma GFCIs | Mr. Someone Else – CP/So<br>Mr. Supersafety Man – QP/<br>Mr. Work Man – QP/First A<br>Mr. Fall Safety – CP/Fall Pi<br>Mr. Shocker Cord – QP/Ele<br>Mr. Lift Boom – QP/Crane of<br>Training Requirements: | /First Aid and CPR<br>id and CPR<br>rotection<br>ectrical          | Inspect scaffold daily (Use Checklist)  Inspect level and plumb of scaffoldings during erectidaily when in use.  Daily Housekeeping of work areas and scaffolding  Inspect PPE to include fall protection harnesses and lanyards prior to use.   |     |
| Power Cords<br>Ladders<br>First Aid Kit   | Fall Protection Inspection of Work Platforn Heat or Cold Hazards Daily/Monthly safety toolbo   |  | Inspect fall protection anchor points.  Inspect crane IAW manufacture instructions.  Inspect power cord sets prior to use.  Inspect temporary power panel box, circuit breakers grounding, etc. at least monthly.  Inspect first aid kit at least monthly.  Daily site safety inspections by SSHO and CQC. | ·,  |
|   |  |  |  |     |