

APPENDIX B

Hammond Depot 2020 ESOH Aspect and Hazard Inventory Forms

- B-1 Hammond Depot Process Environmental Aspect Identification Forms
- B-2 Hammond Depot Process Hazard and Risk Assessment Forms
- B-3 Hammond Depot ESOH Risk Analysis Worksheet

APPENDIX B-1

Hammond Depot Process Environmental Aspect Identification Forms

Process Environmental Aspect Identification (Hammond Office)

Process Name: Facility and Equipment Maintenance (Contractor) Identification Completed By: Nate Walsko

Process Owners: DLA Strategic Materials

Date: 2-20-2020

Review the process, list inputs and associated aspects. Determine the impact. Indicate if the aspect is regulated.

Reg (if applicable) = 2 S: Severity O: Occurrence D: Detectability RPN: Risk Priority Number = Reg x S x O x D

| Input | Aspect | Impact | Controls, BMPs, and Preventive Measures | Reg | S | O | D | RPN |
|---|---|--|--|-----|---|---|---|-----|
| Used Oil/Used Oil Filters | Hazardous Waste | Degradation to land and ground water quality | Contractor moves all oils to Safety Kleen | Y | 6 | 3 | 2 | 72 |
| Degreasers/Solvents | Hazardous Waste and Fumes | Degradation of Land, Water, and Air Quality | Contractor moves all oils to Safety Kleen | Y | 7 | 5 | 2 | 140 |
| Fuel (Gasoline and Diesel) Storage | Spills | Degradation to Land and Water Quality | Inspections, Preventive Maintenance | Y | 7 | 5 | 2 | 140 |
| Lighting Replacement (perimeter, warehouse, and office) | Universal Waste - high pressure sodium, mercury vapors, and fluorescent | Degradation to land and ground water quality | Proper Disposal | Y | 5 | 2 | 1 | 20 |
| Snow removal | Fuel usage/exhaust | Degradation to Air quality | Preventive Maintenance (changing filters) | N | 3 | 5 | 5 | 75 |
| Ice removal! | salt application | Degradation to land and ground water quality | Use chemical substitute (Calcium Chloride) | N | 3 | 3 | 6 | 54 |
| Grating of roads (laying out road with slag) | Exhaust/dust | Degradation to Air quality | Preventive Maintenance | N | 3 | 3 | 5 | 45 |
| Vegetation Control - lawn maintenance | Fuel usage/exhaust | Degradation to Air quality | Preventive Maintenance | N | 3 | 4 | 6 | 72 |

Process Environmental Aspect Identification (Hammond Office)

Process Name: Office Operations

Identification Completed By: Nate Walsko

Process Owners: DLA Strategic Materials

Date: 2-20-2020

Review the process, list inputs and associated aspects. Determine the impact. Indicate if the aspect is regulated.

Reg (if applicable) = 2 S: Severity O: Occurrence D: Detectability RPN: Risk Priority Number = Reg x S x O x D

| Input | Aspect | Impact | Controls, BMPs, and Preventive Measures | Reg | S | O | D | RPN |
|---|-------------------------------------|---|---|-----|---|---|---|-----|
| Lighting | Fluorescent Bulbs - Universal Waste | Degradation to land and groundwater quality | Universal Waste Program, Universal Waste Training | Y | 5 | 3 | 1 | 30 |
| Batteries | Universal Waste | Degradation to land and groundwater quality | Universal Waste Program, Universal Waste Training | Y | 3 | 3 | 5 | 90 |
| Recycling (paper, plastic, aluminum cans, toner cartridges) | General Recycling | Preservation of renewable and non-renewable resources | BMP: Recycling | N | 2 | 4 | 2 | 16 |
| General office refuse | Solid Waste | Degradation to land and groundwater quality | | N | 2 | 6 | 2 | 24 |
| HVAC (Natural Gas) | Energy consumption | Consumption of non-renewable resources | BMP: Temperature Control (80 in summer, 68 in winter) | N | 2 | 2 | 4 | 16 |
| HVAC (Natural Gas) | Natural Gas Leak (Freon D: higher) | Degradation to land and groundwater quality | | N | 5 | 2 | 2 | 20 |
| Electricity | Energy consumption | Consumption of non-renewable resources | BMP: Keep appliances unplugged when not use, BMP: Turn off lights when leaving room, Energy Star appliances (recommended: install motion sensor lights) | N | 2 | 2 | 7 | 28 |

| Input | Aspect | Impact | Controls, BMPs, and Preventive Measures | Reg | S | O | D | RPN |
|---|------------------------|--|--|------------|----------|----------|----------|------------|
| Water | Resources Utilization | Consumption of non-renewable resources | High efficiency toilets | N | 2 | 2 | 7 | 28 |
| Cleaning Supplies | Spills, VOCs | Degradation to land, surface, or groundwater quality | Eco-friendly supplies | N | 2 | 2 | 5 | 20 |
| Appliances/Electronics (microwave, refrigerator, tvs, computer monitors, printers, coffee maker, toaster, stove) | Hazardous /Solid Waste | Degradation to land and groundwater quality | Energy Star appliances | N | 3 | 4 | 2 | 24 |

Process Name: Outloading/Receiving by Truck and Rail

Identification Completed By: Nate Walsko

Process Owners: DLA Strategic Materials

Date: 2-20-2020

Review the process, list inputs and associated aspects. Determine the impact. Indicate if the aspect is regulated.

Reg (if applicable) = 2 S: Severity O: Occurrence D: Detectability RPN: Risk Priority Number = Reg x S x O x D

| Input | Aspect | Impact | Controls, BMPs, and Preventive Measures | Reg | S | O | D | RPN |
|--|------------------------------|--|--|-----|---|---|---|-----|
| Equipment Leak | Hydraulic/oil spill | Degradation to land, surface, or groundwater quality | Spill prevention kits on vehicles, first responder training, SPCC, Pre-ride inspections for forklift | Y | 9 | 2 | 2 | 72 |
| Material Leak (drums) | Material spill | Degradation to land, surface, or groundwater quality | Training, Spill prevention kits | N | 3 | 3 | 2 | 18 |
| Supply Dunnage to Truck (Outloading Only) | Natural Resources Usage | Consumption of natural resources | | N | 2 | 6 | 2 | 24 |
| Equipment Operation | Fugitive Dust | Degradation to Air Quality/Air Emissions | BMP: Water down commodity | N | 2 | 4 | 2 | 16 |
| Equipment Operation | Exhaust fumes | Degradation to Air Quality/Air Emissions | Preventative Maintenance, BMP: Using propane inside | N | 2 | 4 | 2 | 16 |
| Material Leak- Drum Flammable solid/ toxic | Flammable solid toxic spills | Health Haz./ Fire Haz. | SOP/ Training/ PPE | N | 7 | 2 | 5 | 70 |

APPENDIX 8-2

Hammond Depot Process Hazard Identification and Risk Assessment Forms

Process Hazard Identification and Risk Assessment (Hammond Office)

Process Name: Equipment and facility maintenance

Identification Completed By: Nate Walsko

Process Owners: DLA Strategic Materials

Date: 2-20-2020

S: Severity O: Occurrence D: Detectability RPN: Risk Priority Number = S x O x D

| Hazard | Activity | Potential Accident | Controls, BMPs, and Preventive Measures | S | O | D | RPN |
|--|---|----------------------------|---|----|---|---|-----|
| Exposure, Inhalation, ingestion, skin absorption | Fluid replacement | Personal injury | PPE | 7 | 6 | 2 | 84 |
| Electrical | Power tool usage | Electrocution/shock | Training, inspections, LO/TO | 10 | 4 | 5 | 200 |
| Height | Changing light bulbs (perimeter and warehouse lights) | Fall | Safety Equipment, Fall Protection | 10 | 3 | 2 | 60 |
| Pinch points | General Maintenance | Finger injury, hand injury | PPE (gloves), Training | 8 | 7 | 8 | 448 |
| Strains | General Maintenance | Neck and back injury | Training | 6 | 6 | 8 | 288 |

Process Hazard Identification and Risk Assessment (Hammond Office)

Process Name: Office Operations

Identification Completed By: Nate Walsko

Process Owners: DLA Strategic Materials

Date: 2-20-2020

S: Severity O: Occurrence D: Detectability RPN: Risk Priority Number = S x O x D

| Hazard | Activity | Potential Accident | Controls, BMPs, and Preventive Measures | S | O | D | RPN |
|---------------------------------------|--|---|--|---|---|---|-----|
| Ergonomics | Repetitive Motion/typing | Carpal Tunnel | Ergonomics training, ergonomically safe office furniture and equipment | 7 | 4 | 9 | 252 |
| Tripping | Walking | Slip/trip/Fall over chords, other obstacles | Slips/trips/Falls Training, BMP: Good Housekeeping | 7 | 4 | 2 | 56 |
| Fluorescence/Optical damage | Reading on Computer Screens, Working in fluorescent lights | Eye problems, eye irritation | Anti-glare screens, vision tests | 7 | 4 | 9 | 252 |
| Strains | Receiving Office Supplies - Bending and lifting | Pulled muscle, back problems from heavy lifting | Training, equipment (dollies) | 7 | 5 | 2 | 70 |
| Broken bulb: Glass, Chemical Exposure | Changing Light bulbs | Cuts, inhalation, chemical exposure | | 6 | 3 | 2 | 36 |

Process Hazard Identification and Risk Assessment (Hammond Office)

Process Name: Outloading/Receiving Operations

Identification Completed By: Nate Walsko

Process Owners: DLA Strategic Materials

Date: 2-20-2020

S: Severity O: Occurrence D: Detectability RPN: Risk Priority Number = S x O x D

| Hazard | Activity | Potential Accident | Controls, BMPs, and Preventive Measures | S | O | D | RPN |
|------------------------------|-------------------------------|--|--|----|---|---|-----|
| Weather Conditions | Driving / walking on icy ramp | Fatality, Loss of control, Unable to stop | BMP: Keeping ramp inside warehouse until needed, Salt approach to ramp | 10 | 7 | 2 | 140 |
| Tip over, Loss of control | Forklift Operation | Accidents/injuries/fatalities | Training, Safety Belt, Pre-ride inspection | 10 | 5 | 2 | 100 |
| Ramp pulling away from truck | Securing Ramp/Chains/Chock | Accidents/injuries/fatalities | Training | 10 | 5 | 2 | 100 |
| Dust/fumes | Equipment Operation | Inhalation | Respirators, Training, BMP: Water down area, Sweep area | 10 | 5 | 2 | 100 |
| Low lighting | Working in warehouse | Slip/Trip/Fall, Collision of mobile equipment with material/people/obstacles | Upgraded lighting | 10 | 5 | 2 | 100 |

APPENDIX B-3

Hammond Depot ESOH Risk Analysis Worksheet

INTERPRETIVE GUIDANCE DOCUMENT (IGD)

Environmental, Safety and Occupational Health Management System

TABLE B-3
Hammond ESOH Risk Analysis Worksheet

| Task, Input, Process Description | Environmental Aspect/ Safety and Occupational Health Risk | Environmental/Safety and Occupational Health Impact | Severity | | Detectability | Regulatory Mission C | RPN | Significance Rating Y/N | Comments Recommendations | Concur EMS MGR |
|---|---|---|------------|----------|---------------|----------------------|-----|-------------------------|--------------------------|----------------|
| | | | Occurrence | Severity | | | | | | |
| Practice: Office Employee Activities | | | | | | | | | | |
| Batteries | Universal Waste | Degradation to land and groundwater quality | 3 | 3 | 5 | Y | 90 | N | | C |
| Recycling (paper, plastic, aluminum cans, toner cartridges) | General Recycling | Preservation of renewable and non-renewable resources | 2 | 4 | 2 | N | 16 | N | | C |
| General office refuse | Solid Waste | Degradation to land and groundwater quality | 2 | 6 | 2 | N | 24 | N | | C |
| HVAC (Natural Gas) | Energy consumption | Consumption of non-renewable resources | 2 | 2 | 4 | N | 16 | N | | C |
| HVAC (Natural Gas) | Natural Gas Leak (Freon D: higher) | Degradation to land and groundwater quality | 5 | 2 | 2 | N | 20 | N | | C |
| Electricity | Energy consumption | Consumption of non-renewable resources | 2 | 2 | 7 | N | 28 | N | | C |
| Water | Resources Utilization | Consumption of non-renewable resources | 2 | 2 | 7 | N | 28 | N | | C |

TABLE B-3
Hammond ESOH Risk Analysis Worksheet

| Task, Input, Process Description | Environmental Aspect/ Safety and Occupational Health Risk | Environmental/Safety and Occupational Health Impact | Severity | Occurrence | Detectability | Regulatory Mission | RPN | Significance Rating Y/N | Comments/Recommendations | Concur EMS MGR |
|---|---|--|----------|------------|---------------|--------------------|-----|-------------------------|--------------------------|----------------|
| Cleaning Supplies | Spills, VOCs | Degradation to land, surface, or groundwater quality | 2 | 2 | 5 | N | 20 | N | | C |
| Appliances/Electronics (microwave , refrigerator, tvs, computer monitors, printers, coffee maker, toaster, stove) | Hazardous /Solid Waste | Degradation to land and groundwater quality | 3 | 4 | 2 | N | 24 | N | | C |
| Ergonomics | Physical Health and Safety Hazard | Degradation to Human Health | 7 | 4 | 9 | N | 252 | Y | | C |
| Tripping | Physical Health and Safety Hazard | Degradation to Human Health | 7 | 4 | 2 | N | 56 | N | | C. |
| Fluorescence/ Optical damage | Physical Health and Safety Hazard | Degradation to Human Health | 7 | 4 | 9 | N | 252 | Y | | C |
| Strains | Physical Health and Safety Hazard | Degradation to Human Health | 7 | 5 | 2 | N | 70 | N | | C- |
| Practice: Outloading/Receiving by Truck and Rail | | | | | | | | | | |
| Equipment Leak | Hydraulic/oil spill | Degradation to land, surface, or groundwater quality | 9 | 2 | 2 | Y | 72 | N | | C, |

TABLE B-3
Hammond E.S.OH Risk Analysis Worksheet

| Task, Input, Process Description | Environmental Aspect/ Safety and Occupational Health Risk | Environmental/Safety and Occupational Health Impact | Severity | Occurrence | Detectability | Regulatory Mission | RPN | Significance Rating Y/N | Comments Recommendations | Concur EMS MGR |
|---|---|--|----------|------------|---------------|--------------------|-----|-------------------------|--------------------------|----------------|
| Material Leak (drums) | Material spill | Degradation to land, surface, or groundwater quality | 3 | 3 | 2 | N | 18 | N | | C. |
| Supply Dunnage to Truck (Outloading Only) | Natural Resources Usage | Consumption of natural resources | 2 | 6 | 2 | N | 24 | N | | C |
| Equipment Operation | Fugitive Dust | Degradation to Air Quality/Air Emissions | 2 | 4 | 2 | N | 16 | N | | C. |
| Equipment Operation | Exhaust fumes | Degradation to Air Quality/Air Emissions | 2 | 4 | 2 | N | 16 | N | | C. |
| Weather Conditions | Physical Health and Safety Hazard | Degradation to Human Health | 10 | 7 | 2 | N | 140 | N | | C... |
| Tip over, Loss of control (Forklift Operation) | Physical Health and Safety Hazard | Degradation to Human Health | 10 | 5 | 2 | N | 100 | N | | C. |
| Ramp pulling away from truck (securing ramp, chains, chock) | Physical Health and Safety Hazard | Degradation to Human Health | 10 | 5 | 2 | N | 100 | N | | C_ |
| Dust/fumes (Equipment Operation) | Physical Health and Safety Hazard | Degradation to Human Health | 10 | 5 | 2 | N | 100 | N | | C... |
| Material leak, drum - flammable- solid- toxic | Hazardous material | Health Haz. / Fire Haz. | 8 | 2 | 5 | N | 80 | Y | | V |

TABLE B-3

Hammond ESOH Risk Analysis Worksheet

| Task, Input, Process Description | Environmental Aspect/ Safety and Occupational Health Risk | Environmental/Safety and Occupational Health Impact | Severity | Occurrence | Detectability | Regulatory Mission | RPN | Significance Rating Y/N | Comments Recommendations | Concur EMS MGR |
|--|---|---|----------|------------|---------------|--------------------|-----|-------------------------|--------------------------|----------------|
| Low lighting | Physical Health and Safety Hazard | Degradation to Human Health | 10 | 5 | 2 | N | 100 | N | | C |
| Practice: Maintenance Activities | | | | | | | | | | |
| Used oil/Used oil filters | Hazardous Waste | Degradation to land and ground water quality | 6 | 3 | 2 | Y | 72 | N | | C. |
| Degreasers/Solvents | Hazardous Waste/ Air Emissions | Degradation of Land, Water, and Air Quality | 7 | 5 | 2 | N | 72 | N | | C.. |
| Fluorescent Bulbs | Hazardous Waste | Degradation to land and ground water quality | 5 | 2 | 1 | Y | 20 | N | | C... |
| Snow removal | Fuel usage/exhaust | Degradation to Air quality | 3 | 5 | 5 | N | 75 | N | | C. |
| Ice removal | salt application | Degradation to land and ground water quality | 3 | 3 | 6 | N | 54 | N | | C.. |
| Grating of roads (laying out road with slag) | Exhaust/dust | Degradation to Air quality | 3 | 3 | 5 | N | 45 | N | | C_. |
| Vegetation Control - lawn maintenance | Fuel usage/exhaust | Degradation to Air quality | 3 | 4 | 6 | N | 72 | N | | C.... |
| Exposure, Inhalation, ingestion, skin | Physical Health and Safety Hazard | Degradation to Human Health | 7 | 6 | 2 | N | 84 | N | | C....- |

TABLE B-3
Harrnond ESOH Risk Analysis Worksheet

| Task, Input, Process Description | Environmental Aspect/ Safety and Occupational Health Risk | Environmental/Safety and Occupational Health Impact | Severity | Occurrence | Detectability | Regulatory Mission | RPN | Significance Rating Y/N | Comments Recommendations | Concur EMS MGR |
|------------------------------------|---|---|----------|------------|---------------|--------------------|-----|-------------------------|--------------------------|----------------|
| absorption | | | | | | | | | | C. |
| Electrical (Power tool usage) | Physical Health and Safety Hazard | Degradation to Human Health | 10 | 4 | 5 | N | 200 | N | | C. |
| Height (changing lightbulbs) | Physical Health and Safety Hazard | Degradation to Human Health | 10 | 3 | 2 | N | 60 | N | | C. |
| Pinch points | Physical Health and Safety Hazard | Degradation to Human Health | 8 | 7 | 8 | N | 448 | Y | | C. |
| Strains | Physical Health and Safety Hazard | Degradation to Human Health | 6 | 6 | 8 | N | 288 | Y | | C. |
| Practice: Storage | | | | | | | | | | |
| Fuel (Gasoline and Diesel) Storage | Spills | Degradation to Land and Water Quality | 7 | 4 | 2 | Y | 112 | N | | C.. |

COMMENTS/RECOMMENDATION