CHEMICAL MANAGEMENT PROCEDURE

1. **PURPOSE**

   The control of all chemicals.

2. **SCOPE**

   Includes all chemicals on facility grounds.

3. **RESPONSIBLE**

   A. PESM has primary responsibility.
   B. IATF MR has alternate responsibility
   C. Parts Clerk is responsible to ensure that purchase orders have received SDS.
   D. PO Requester is responsible to submit documentation for ALL new chemicals BEFORE ordering.

4. **DEFINITIONS / ABBREVIATIONS**

   A. OSHA — Occupational Safety Health Administration - Regulate safety, health and general standards.
   B. GHS — Globally Harmonized System of Classification and labeling of chemicals.
   C. Hazardous — Chemical is hazardous to health and /or environment.
   D. SDS — Safety Data Sheet - GHS Uniform format SDS
   E. CWDC — Certified Waste Disposal Company
   F. MR — Management Representative

5. **NEW CHEMICALS** REFER TO 'ENVIRONMENTAL ASPECT & IMPACT ANALYSIS' (#EN03-001)

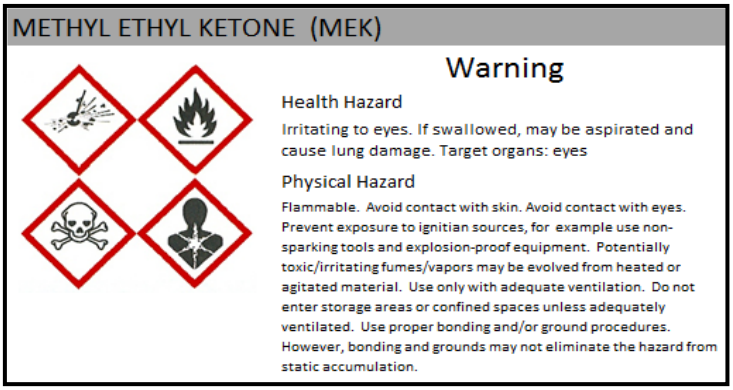
   ******Employees / Subcontractors are not permitted to bring chemicals to include: Rented Equipment with chemicals added (ie: gas) in the building that have not gone through the New Chemical Process.******

   A. Personal use items (i.e. hand sanitizers and lotions) must be taken home or stored in lockers at the end of shift

6. **CHEMICAL MANAGEMENT**

   A. ALL Chemicals MUST be labeled.
      I. Including:
         a. Any container that is not the original chemical container (ie: spray bottles)
         b. Temporary Containers
         c. Tanks (ie: mold cleaning tanks)
   B. Label Requirements: Internal
      I. GHS Label
   C. GHS Labeling
      i. Product Identifier (Chemical Name)
      ii. Signal Word (ex: Danger)
      iii. Hazard Statement
      iv. Pictogram(s)
      v. Precautionary Statements
      vi. Manufacturers information
   D. Obtain information for labels from SDS
   E. Refer to 'Chemical Labeling / Storage Examples' (reference only)

GHS Label Example



7. **CHEMICAL WASTE LABELING**

   A. The operator that begins a new waste accumulation, whether hazardous or non-hazardous, is responsible to attach the labels and properly fill in the label with all pertinent data such as the accumulation start date. The operator must also ensure that any and all old labels are removed or blacked out.

B. Label all chemical waste containers.
   i. This includes containers used to transport waste chemicals to disposal areas such as the oil receptacle and the Non-Hazardous waste pit.
C. Hazardous waste
   i. Label with Hazardous Waste Label
   ii. Must have accumulation start date and chemical name on the label.
D. Non-Hazardous Waste
   i. Label with Non-Hazardous Waste Label
   ii. Must have chemical name on the label.
E. Refer to 'Chemical Labeling / Storage Examples' (reference only)

8. **RECEIVING INSPECTION**
   A. Passed labels / certification review
   B. Place proper GHS labels on chemicals as needed
   Refer to 'RECEIVING INSPECTION' (#WI10-086)

9. **CHEMICAL HANDLING / STORAGE** Expired Rubber WI09-027 Chemical Rules
   A. Each chemical storage/flammable locker will have a primary and alternate person responsible to perform inspections.
      i. Train primary and alternate for inspection responsibilities for cabinets
      ii. If only one person is available, that person is responsible to train an alternate
      iii. CL09-005 Oil Chemical Storage Inspection Checklist approval box only requires initials when a checklist item is marked as Non-Conforming.
   B. General Rules
      i. Store chemicals on shelves, secondary containment pallets, pallets, etc.
      ii. DO NOT store chemicals on the floor.
      iii. Store chemicals clear of high traffic areas
      iv. ALWAYS close chemical containers when not in use.
      v. Store flammable chemicals in flammable cabinets.
      vi. Chemicals with a high viscosity such as grease, are permitted to be stored with pumps and hoses remaining in the container. Lower viscosity fluids shall NOT have hoses left in containers.
   C. Refer to SDS for specific storage requirements per chemical.
   D. Refer to 'Chemical Storage Rules' sign for examples.
   E. Refer to 'Chemical Expiration Handling' (#WI09-027)

10. **WASTE MANAGEMENT**
   A. **GENERAL RULES**
      i. ***RECORD ALL MEK WASTE WEIGHT ON THE WASTE LOG #QF09-110***
      ii. DO NOT DUMP CHEMICAL OUTSIDE ON GROUND OR DOWN THE DRAIN!!!
      iii. DISPOSE OF CHEMICALS ACCORDING TO SDS PROCEDURES.
      iv. STORE ALL CHEMICALS ACCORDING TO Chemical Handling / Storage instructions (section 9 of this procedure)
      v. All hazardous chemical waste records must be retained for 3 years.

11. **TRANSPORT**

FOLLOW SAFETY REQUIREMENTS WHEN HANDLING CHEMICALS. WEAR REQUIRED PPE.

A. Remove chemical from machine / container and put into LABELED container.
   i. Follow Labeling requirements (section 6 of this procedure)
B. Close container lid before transport.
C. Weight MEK chemical and record the weight on the Chemical Waste Disposal Log (#QF09-110)
D. Take to disposal area.
   i. Used oil goes to the recycle container located in the oil shed for recycling, or placed in the used absorbents container for Generation Green Recycling.
   ii. Oily water, cleaning water, silicone mixtures, etc. to Non-Hazardous Waste Pit located outside Wet Blast area.
   iii. For other chemicals such as MEK, Sodium Hydroxide, and BTO, use 55 gallon drums. Use smaller drums only if 55 gallon drums are not available.
      a. Ensure the container is labeled according to labeling requirements (section 6 of this procedure)
      b. Remove drum caps and position the funnel in the proper opening on top of the drum.

**** CAUTION ****
FUNNEL MUST REMAIN CLOSED AND LATCHED WHEN NOT IN USE

      c. When starting a new drum - ensure proper label is attached before filling the drum and fill out the accumulation start date.
   iv. Refer to Plant Layout - Waste Recycle for receptacle locations.

ENSURE THE CHEMICAL WASTE IS TAKEN AND DISPOSED OF ACCORDING TO WORK INSTRUCTIONS / PROCEDURES!!!

12. **C. RECYCLE / PICK UP PROCESS.**

A. Many chemicals are picked up for disposal.
   i. Refer to 'Chemical Waste Disposal Requirements' (#SP09-116)
   ii. Chemicals must be picked up by certified waste disposal company.
B. Schedule the pickup through the CWDC.
C. The CWDC will arrive to pick up the chemical waste.
   i. The CWDC will provide required DOT documents to be signed by a trained authorized representative from UMA.
      a. This is a carbon copy form - ensure UMA copy is legible.
      b. Forward SIGNED copy of the manifest to the ISO 14001 Management Representative.
      c. The PESM files all documents.
      d. The PESM records pickups on the QF09-227 NHNR/Hazardous Waste Log.
   ii. Authorized representative: Must be HAZMAT Trained.
   iii. ***UMA is fully responsible for the chemicals until final disposal is complete.***

D. Hazardous Waste - Original manifest from the CWDC is a federal requirement.
   i. The CWDC will use the EPA Central Data Exchange (CDX) to input completed manifests. The PESM has access to the system to verify the manifests are complete and are attached within timing requirements.
   ii. Completed manifests are retained in the EPA/CDX.
   iii. The PESM shall verify, on the monthly generated work order for manifests, that the manifest is signed and uploaded in CDX before the exception reporting criteria of (60) days.
      - If criteria is not met, the generator (UMA) must submit (to the Hazardous Waste Section) a legible copy of the manifest, with some indication that the generator has not received confirmation of delivery.
   iv. Hazardous waste shall be determined per 40 CFR 262.11.

E. **Excluded Solvent Contaminated Wipes - Reuseable**
   i. **Note: No wipes used with solvents shall be of the disposable type.**
   ii. Solvent- contaminated wipes, when accumulated, stored, and transported must be placed in:
      a. Non- leaking, closed container marked "Excluded Solvent Contaminated Wipes"
      b. The person starting accumulation for this container shall annotate the container with the accumulation start date and wipes may be accumulated for up to 180 days from the start date of the accumulation for each container prior to being sent for laundering.
      c. These containers shall have "no free liquids" in the container before transport for laundering. Free liquids defined IAW 40 CFR 260.10 means liquids which readily separate from the solid portion of a waste under ambient temperature and pressure.
      d. Reuseable wipes from daily use excluded solvent contaminated containers, shall be placed in plastic bags tied, and placed into Generation Green excluded solvent contaminated wipes containers for laundering and reuse.
   iii. **Free Liquid Management**- Free liquids removed from the solvent contaminated wipes or from the container holding the wipes will follow hazardous waste management procedures as outlined above.
   iv. **Generation Green** will provide a supply of rags suitable for solvents and schedule pick up of all dirty rags to include excluded solvents contaminated wipes at time periods normally not exceeding 60 days. Documentation of these pick ups shall serve as proof of not exceeding the 180 accumulation criteria.

F. **Oily Reuseable Rags** stored in daily containers, shall be emptied into the Generation Green dirty rag containers for laundering and reuse.

13 SUBCONTRACTOR

A. Subcontractors must be trained for key points of chemical management.
B. Refer to 'Visitors & Sub-Contractors' (#EN04-003)

14 VERIFICATION

A. The Environmental Team will audit chemical management 1 time per quarter.
   i. Pictures may be attached.
   ii Additional walkthroughs will be conducted so that every department is completed every 6 months.
B. ANY non conformances will be recorded on the 'INTERNAL QUALITY / ENVIRONMENTAL AUDIT NON-CONFORMANCE REPORT' (#QF17-005) & follow the IQA NC report process - Refer to INTERNAL QUALITY/ENVIRONMENTAL AUDITS (#QP-008)

15 **SATELLITE ACCUMULATION POINTS (Reference 40CFR 262.15)**

A. There is one satellite accumulation point in the Rubber Lab for chemicals. This area shall follow the requirements outlined below.

i. To accumulate waste without a permit for greater than 180 days for a small quantity generator, all of the following must be met:

a. Waste must be in a container that meets the requirements of the container regulations.

b. Accumulate up to 55 gallons of non-accute hazardous waste at the satellite accumulation point.

c. If accumulation exceeds 55 gallons, any excess must be removed to a central accumulation point within 3 days.

1) Excess must be labeled and dated as of the date the excess began.

2) If not, it must be removed within 3 days or the area becomes a central accumulation point.

3) Containers DO NOT have to the dated until they exceed 55 gallons on Non-Hazardous waste.

d. Must be at or near the point of generation and under control of the operator.

e. Containers must be labeled with the words "Hazardous Waste" and indicate the type of waste in the container.

f. Containers must be closed except when adding, removing, or consolidating wastes.

1) Closed means all bungs are closed and lids secured to ensure that if the container was tipped over, the waste would not spill out.

g. Safety funnels may be used when the following requirments are met:

1) Securely fitted to the opening and not damaged.
AND:

2) Fitted with a gasket when closed and fitted with a locking mechanism on the lid, and the lid is maintained in the closed position unless necessary to add or remove waste.
OR:

3) The funnel is fitted with a one way valve to allow waste to enter the container but will not allow the waste to exit the container.

h. There must be enough aisle space to determine spill control, fire, and other emergency equipment to each container of waste and areas at SQG must meet the preparedness and prevention requirements of 40 CFR 262.16(b)(8) & emergency procedures of 40 CFR 262.16(b)(9).

B. Rubber Lab - will use container(s) that meet requirements for chemicals processed.

16 **PROPANE GAS BOTTLES**

***ONLY TRAINED PERSONNEL WILL PERFORM THIS**

***WARNING:* Failure to follow these instructions may cause serious injury or death.**

A. Store empty propane bottles in the parts room until ready for refill.

B. Destroy only damage, non-repairable bottles or non-refillable bottles.
DO NOT THROW IN THE TRASH.

i. Wear appropriate PPE: Cold insulated gloves and safety glasses
WARNING: Contact with liquified gas can cause frostbite

ii. Ensure the vise is grounded

iii. Vent the Propane Gas Bottle - leave the valve open

iv. Securely input Propane Gas Bottle into vise

v. Slowly close vise to puncture bottle

vi. When all pressure releases, throw bottle into metal dumpster

NO OPEN FLAMES, NO SMOKING!

C. PROPANE GAS BOTTLES (1lb)

i. Bottle Exchange:

a. Inspect the empty container for rust, dents, gouges, fire/valve damage, etc. BEFORE turn-in for exchange.

b. Take the refillable bottles to the parts room.

1) DO NOT DAMAGE or THROW IN THE TRASH

c. Exchange is one-for one, turn in an empty bottle and receive a filled bottle.

1) The parts room clerk will retain the safety cap for placement on the returned empty bottle.

NOTE: ONLY TRAINED PERSONNEL WILL REFILL 1LB BOTTLES OF PROPANE

WARNING:

PROPANE SMELLS LIKE ROTTEN EGGS. IF ONE SMELLS ROTTEN EGGS OR A SKUNK LIKE ODOR, THERE IS MOST LIKELY A LEAK. TAKE APPROPRIATE ACTION TO PREVENT ANY FIRES OR EXPLOSION.

DANGER

FAILURE TO FOLLOW THESE INSTRUCTIONS MAY CAUSE SERIOUS INJURY OR DEATH

D. Refill Propane Gas Bottles

i. Wear the proper PPE as stated on the SDS; Minimum safety glasses with side shields for splash as well as chemical and cold resistant gloves.

ii. Prior to filling the bottle, inspect it for rust, dents, gouges, fire or valve damage.

iii. Verify DOT markings, GHS labels and DOM.

a. DOM with no letter following the date, the tank is good for 10 years.

b. DOM with the letter "S" following is good for 7 years.

c. DOM with the letter "E" is good for 5 years.

iv. If there are ANY issues with the tank - DO NOT fill the tank.

v. Use tank support for 20-pound propane tanks and turn the tank upside down onto the stand.

a. The tank can ONLY be upside down for a MAXIMUM of 10 minutes.

vi. Install the filling adapter to the 20lb tank.

vii Attach the 1lb tank to the filling adapter.

viii. Open the service valve on the 20lb tank.

ix. Open the fixed liquid maximum level gauge on the lb tank using a 5/64th Allen Wrench.

xi. Release the deadman valve and close the fixed liquid maximum level gauge.

xii. Repeat steps vii through xi until all tanks are filled as necessary.

xiii. Close the service valve on the Propane tank when finished filling all tanks.

xiv. Inspect all filled tanks for leaks using a gas leak detector.

xv. If bottles leak, take appropriate action as identified on the SDS.

a. This is a hazardous material and should be treated as such.