

# Risk Management Plan Audit Program Renewal or Revised RMP Update Checklist

This Risk Management Plan (RMP) Audit Program Checklist has been developed to ensure compliance with the Accidental Release Prevention requirements under Section 112(r) of the Clean Air Act (CAA), as amended in 1990. This checklist is sent to all contractors that currently operate a facility that manufactures, processes, stores, or handles a regulated substance over the threshold quantity to update all pertinent information needed to complete an RMP renewal or revision and to ensure that the facility remains in compliance with RMP regulations.

## ***SECTION I: General Information***

- 1. Process:**
- 2. Area:**
- 3. Current Regulated Substance:**
- 4. RMP Project Lead:**

*NOTE: If more than one process is applicable to RMP regulations, please include a separate checklist for each process.*

## ***SECTION II: Compliance Objectives***

The questions in this section refer to changes or modifications made to the process or operations in your area over the past year, unless otherwise stated. Please use yes or no answers to the questions and only expand on the answers where asked to or necessary. If the question does not pertain to your operations, please answer Not Applicable or N/A and explain why this is true.

### **1. Regulated Substances**

- a) Has the quantity of the regulated substance currently stored changed or are there plans to change the quantity in the future (see list of regulated substances, starting on page 4)?

**Please check one:**                      **Yes:**                       **No:**

If yes, please submit a list of the amount of the increase or decrease and of what substance(s).

- b) Has there been any regulated substances added to your process or are the plans to add any regulated substances in the future (see list of regulated substances, starting on page 4)?

**Please check one:**                      **Yes:**                       **No:**

If yes, please submit a list what substance(s), the quantity of each, and the hazards pertaining to the substance(s).

### **2. Process**

- a) Has the location of the process been moved, contracted, or expanded that would impact the release mitigation area?

**Please check one:**                      **Yes:**                       **No:**

If yes, please submit a map showing the new location or a description of the contraction, or expansion of the process.

- b) Has the process been modified or has a new process been added that would impact the release mitigation area (i.e., new storage of the substances, new operations utilizing the substances)?

**Please check one:**                      **Yes:**                       **No:**

If yes, please submit a description of the modified or new process.

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### 3. Accidents

- a) Have there been any accidental releases in the past year that resulted in off-site death, injury, or response or restoration activities for an exposure to the public and/or environmental receptors?

**Please check one:**                      **Yes:**                       **No:**

If yes, please submit the accident report?

- b) Are the records for the past 5 years maintained?

**Please check one:**                      **Yes:**                       **No:**

- c) Have there been any operational or process changes that resulted from an investigation of the release that resulted in off-site death, injury, or response or restoration activities for an exposure to the public and/or environmental receptors?

**Please check one:**                      **Yes:**                       **No:**

If yes, please submit a description of the operational or process change.

### 4. Prevention Program

- a) What is the date of the last Safety Inspection by an External Agency and what agency?

**Please check one:**                      **Yes:**                       **No:**

- b) What is the date on which the safety information was last reviewed or revised?

**Please check one:**                      **Yes:**                       **No:**

- c) Has there been a change or an update to the Process Safety Management (PSM)?

**Please check one:**                      **Yes:**                       **No:**

Is the revised PSM document provided on-site?

Is the revised PSM document maintained on a regular basis?

How do you demonstrate compliance with the PSM Standards?

- d) Has there been a change or an update to the PHA?

**Please check one:**                      **Yes:**                       **No:**

Please submit the date or expected date of completion of the most recent PHA or update and the technique used.

- e) What are the major hazards of the process (Check all that apply):

Toxic release?	<b>Yes:</b> <input type="checkbox"/>	Contamination?	<b>Yes:</b> <input type="checkbox"/>
Fire?	<b>Yes:</b> <input type="checkbox"/>	Equipment failure?	<b>Yes:</b> <input type="checkbox"/>
Explosion?	<b>Yes:</b> <input type="checkbox"/>	Loss of environmental functions?	<b>Yes:</b> <input type="checkbox"/>
Runaway reaction?	<b>Yes:</b> <input type="checkbox"/>	Earthquake?	<b>Yes:</b> <input type="checkbox"/>
Polymerization?	<b>Yes:</b> <input type="checkbox"/>	Floods?	<b>Yes:</b> <input type="checkbox"/>
Overpressurization?	<b>Yes:</b> <input type="checkbox"/>	Tornado?	<b>Yes:</b> <input type="checkbox"/>
Corrosion?	<b>Yes:</b> <input type="checkbox"/>	Hurricanes?	<b>Yes:</b> <input type="checkbox"/>
Overfilling?	<b>Yes:</b> <input type="checkbox"/>	Other (specify)?	<b>Yes:</b> <input type="checkbox"/>

- f) What are the controls in use in the process (Check all that apply):

Vents?	<b>Yes:</b> <input type="checkbox"/>	Emergency air supply?	<b>Yes:</b> <input type="checkbox"/>
Relief valves?	<b>Yes:</b> <input type="checkbox"/>	Emergency power?	<b>Yes:</b> <input type="checkbox"/>
Check valves?	<b>Yes:</b> <input type="checkbox"/>	Backup pump?	<b>Yes:</b> <input type="checkbox"/>
Scrubbers?	<b>Yes:</b> <input type="checkbox"/>	Grounding equipment?	<b>Yes:</b> <input type="checkbox"/>
Flares?	<b>Yes:</b> <input type="checkbox"/>	Inhibitor addition?	<b>Yes:</b> <input type="checkbox"/>
Manual shutoffs?	<b>Yes:</b> <input type="checkbox"/>	Rupture disks?	<b>Yes:</b> <input type="checkbox"/>
Automatic shutoffs?	<b>Yes:</b> <input type="checkbox"/>	Excess flow device?	<b>Yes:</b> <input type="checkbox"/>
Interlocks?	<b>Yes:</b> <input type="checkbox"/>	Quench system?	<b>Yes:</b> <input type="checkbox"/>
Alarms and procedures?	<b>Yes:</b> <input type="checkbox"/>	Purge system?	<b>Yes:</b> <input type="checkbox"/>
Keyed bypass?	<b>Yes:</b> <input type="checkbox"/>	Other (specify)?	<b>Yes:</b> <input type="checkbox"/>

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- g) Has there been a change or an update to the operation procedures?  
**Please check one:**                      **Yes:**                       **No:**   
Please submit the date of the latest review or revision to the operation procedures.
- h) Has there been a change or an update to the training program?  
**Please check one:**                      **Yes:**                       **No:**   
Please submit the date of the most recent review or revision of the training program.
- i) Has there been a change or an update to the maintenance procedures?  
**Please check one:**                      **Yes:**                       **No:**   
Please submit the date of the most recent review or revision of the maintenance procedures.  
Please submit the date of most recent equipment inspection or test and what was inspected or tested.
- j) Has there been a change or an update to the management of change procedures?  
**Please check one:**                      **Yes:**                       **No:**   
Please submit the date of most recent change that triggered management of change procedures.  
Please submit the date of the most recent review or revision of the management of change procedures.
- k) Has there been a change or update to the pre-startup review?  
**Please check one:**                      **Yes:**                       **No:**   
Please submit the date of the most recent pre-startup review or revision.
- l) Has there been an RMP compliance audit?  
**Please check one:**                      **Yes:**                       **No:**   
Please submit a description of any changes resulting from the investigation and the expected dates of completion of any changes.
- m) Have there been any incident investigations?  
**Please check one:**                      **Yes:**                       **No:**   
Please submit the date of the most recent investigation and the expected date of completion of any changes resulting from the investigation.
- n) Is there an employee participation plan?  
**Please check one:**                      **Yes:**                       **No:**   
Please submit the most recent review or revision to the plan.
- o) Are there hot work permit procedures?  
**Please check one:**                      **Yes:**                       **No:**   
Please submit the most recent review or revision to the procedures.
- p) Are there contractor safety procedures?  
**Please check one:**                      **Yes:**                       **No:**   
Please submit the most recent review or revision to the procedures.
- q) Are there contractor safety performance evaluations performed?  
**Please check one:**                      **Yes:**                       **No:**   
Please submit the most recent review or revision of contractor safety procedures.  
Please submit the date of the most recent evaluation.
- r) Has the contractor been informed of the known potential fire, explosion, or toxic release hazards and the applicable provisions of the emergency response program related to the contractor's work and the process?  
**Please check one:**                      **Yes:**                       **No:**
- s) Is there a monitoring and detection system in use in your process area?  
**Please check one:**                      **Yes:**                       **No:**   
Does the monitoring and detection system include (Check all that apply):  
Process area detectors? **Yes:**     Perimeter detectors? **Yes:**   
Other (specify)? **Yes:**  \_\_\_\_\_

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t) Is there a mitigation system in use in your process area?

**Please check one:**                      **Yes:**                       **No:**

Does the mitigation system include (Check all that apply):

Sprinkler system? **Yes:**                       Water curtain?    **Yes:**

Dikes?                      **Yes:**                       Enclosure?        **Yes:**

Fire walls?                **Yes:**                       Neutralization?   **Yes:**

Blast walls?               **Yes:**                       Deluge system?   **Yes:**

Other (specify)? **Yes:**  \_\_\_\_\_

***SECTION III: Responsible Personnel Concurrence***

I have reviewed the information contained herein, verified that it is accurate and complete, and hereby submit it to the KSC Environmental Program Branch (EPB) for review and possible revision to the RMP.

Name: \_\_\_\_\_ Mail Code: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

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LIST OF RMP REGULATED SUBSTANCES

CAS	Chemical Name	Threshold (lbs)	Threshold (gal)	Toxic Endpoint
106-98-9	1-butene	10,000	**	**
590-21-6	1-chloropropylene {1-propene, 1-chloro-}	10,000	**	**
109-67-1	1-pentene	10,000	1,869	**
57-14-7	1,1-dimethylhydrazine {Dimethylhydrazine} {Hydrazine, 1,1-dimethyl-}	15,000	2,271	0.012
106-99-0	1,3-butadiene	10,000	1,930	**
504-60-9	1,3-pentadiene	10,000	1,753	**
107-01-7	2-butene	10,000	**	**
590-18-1	2-butene-cis	10,000	1,929	**
624-64-6	2-butene-trans {2-butene, (E)}	10,000	1,983	**
557-98-2	2-chloropropylene {1-propene, 2-chloro-}	10,000	**	**
563-46-2	2-methyl-1-butene	10,000	1,844	**
115-11-7	2-methylpropene {1-propene, 2-methyl-}	10,000	2,031	**
646-04-8	2-pentene (E)-	10,000	1,827	**
627-20-3	2-pentene (Z)-	10,000	1,849	**
463-82-1	2,2-dimethylpropane {Propane, 2,2-dimethyl-}	10,000	2,028	**
563-45-1	3-methyl-1-butene	10,000	1,911	**
75-07-0	Acetaldehyde	10,000	1,536	**
74-86-2	Acetylene {Ethyne}	10,000	1,955	**
107-02-8	Acrolein {2-propenal}	5,000	714	0.0011
107-13-1	Acrylonitrile {2-propenenitrile}	20,000	2,994	0.076
814-68-6	Acrylyl Chloride {2-propenoyl Chloride}	5,000	527	0.0009
107-18-6	Allyl Alcohol {2-propen-1-ol}	15,000	2,105	0.036
107-05-01	Allyl Chloride	1,000	**	**
107-11-9	Allylamine {2-propen-1-amine}	10,000	1,577	0.0032
7664-41-7	Ammonia (Anhydrous)	10,000	1,758	0.14
7664-41-7	Ammonia (≥20%)	20,000	2,723	0.14
7784-34-1	Arsenous Trichloride	15,000	836	0.01
7784-42-1	Arsine {Arsenic Hydride}	1,000	45	0.0019
10294-34-5	Boron Trichloride {Borane, Trichloro-}	5,000	444	0.01
7637-07-2	Boron Trifluoride {Borane, Trifluoro-}	5,000	374	0.028
353-42-4	Boron Trifluoride Compound with Methy Ether (1:1) {Boron, Trifluoro[oxybis[methane]-,T-4}	15,000	1,451	0.023
7726-95-6	Bromine	10,000	386	0.0065
598-73-2	Bromotrifluorethylene {Ethene, Bromotrifluoro-}	10,000	**	**
106-97-8	Butane	10,000	1997	**
25167-67-3	Butene	10,000	2014	**
75-15-0	Carbon Disulfide	20,000	1897	0.16
463-58-1	Carbon Oxysulfide {Carbon Oxide Sulfide (COS)} {Carbonyl Sulfide}	10,000	571	**
7782-50-5	Chlorine	2,500	210	0.0087
10049-04-4	Chlorine Dioxide {Chlorine Oxide (ClO2)}	1,000	75	0.0028
7791-21-1	Chlorine Monoxide {Chlorine Oxide}	10,000	**	**
67-66-3	Chloroform {Methane, Trichloro-}	20,000	1,616	0.49
542-88-1	Chloromethyl Ether {Bis(chloromethyl) Ether} {Methane, Oxybis [chloro-]} {Dichloromethyl Ether}	1,000	91	0.00025
107-30-2	Chloromethyl Methyl Ether {Methane, Chloromethoxy-}	5,000	565	0.0018
4170-30-3	Crotonaldehyde {2-butenal}	20,000	2,833	0.029
123-73-9	Crotonaldehyde, (E)-{2-butenal, (E)-}	20,000	2,810	0.029
460-19-5	Cyanogen {Ethanedinitrile}	10,000	1,256	**
506-77-4	Cyanogen Chloride	10,000	980	0.03

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108-91-8	Cyclohexylamine {Cyclohexanamine}	15,000	2,079	0.16
75-19-4	Cyclopropane	10,000	1,773	**
19287-45-7	Diborane {Diborane (6)}	2,500	**	0.0011
110-05-4	Dibutyl Peroxide (Tertiary)	**	5,000	**
4109-96-0	Dichlorosilane {Silane, Dichloro-}	10,000	999	**
75-37-6	Difluoroethane {Ethane, 1, 1-difluoro-}	10,000	1,261	**
124-40-3	Dimethylamine {Methanamine, N-methyl-}	10,000	1,786	**
75-78-5	Dimethyldichlorosilane {Silane, Dichlorodimethyl-}	5,000	545	0.026
106-89-8	Epichlorohydrin {Oxirane, (Chloromethyl)-}	20,000	1,331	0.076
74-84-0	Ethane	10,000	2,195	**
107-00-6	Ethyl Acetylene {1-butyne}	10,000	1,767	**
75-00-3	Ethyl Chloride {Chloroethane} {Ethane, Chloro-}	10,000	1,323	**
60-29-7	Ethyl Ether {Ethane, 1,1'-oxybis-}	10,000	1,678	**
75-08-1	Ethyl Mercaptan {Ethanethiol}	10,000	1,451	**
109-95-5	Ethyl Nitrite {Nitrous Acid, Ethyl Ester}	10,000	1,331	**
75-04-7	Ethylamine {Monoethylamine} {Ethanamine}	10,000	1,762	**
74-85-1	Ethylene {Ethene}	10,000	2,106	**
75-21-8	Ethylene Oxide {Oxirane}	10,000	1,379	0.09
107-15-3	Ethylenediamine {1,2-ethanediamine}	20,000	2,669	0.49
151-56-4	Ethyleneimine {Aziridine}	10,000	1,440	0.018
7782-41-4	Fluorine	1,000	79	0.0039
50-00-0	Formaldehyde (Solution)	15,000	1,591	0.012
110-00-9	Furan	5,000	639	0.0012
302-01-2	Hydrazine	15,000	1,918	0.011
7647-01-0	Hydrochloric Acid (≥37%)	15,000	1,510	0.03
74-90-8	Hydrocyanic Acid {Hydrogen Cyanide}	2,500	434	0.011
1333-74-0	Hydrogen	10,000	**	**
7647-01-0	Hydrogen Chloride (Anhydrous) {Hydrochloric Acid}	5,000	503	0.03
7664-39-3	Hydrogen Fluoride/hydrofluoric Acid (≥50%) {Hydrofluoric Acid}	1,000	121	0.016
7783-07-5	Hydrogen Selenide	500	28	0.00066
7783-06-4	Hydrogen Sulfide	10,000	1,308	0.042
7803-49-8	Hyroxylamine	**	2,500	**
13463-40-6	Iron, Pentacarbonyl- {Iron Carbonyl (Fe(co)5), (Tb-5-11)-}	2,500	206	0.00044
75-28-5	Isobutane {Propane, 2-methyl}	10,000	2,151	**
78-82-0	Isobutyronitrile {Propanenitrile, 2-methyl-}	20,000	3,149	0.14
78-78-4	Isopentane {Butane, 2-methyl-}	10,000	1,933	**
78-79-5	Isoprene {1,3-butadiene, 2-methyl-}	10,000	1,760	**
75-31-0	Isopropylamine {2-propanamine}	10,000	1,734	**
75-29-6	Isopropyl Chloride {Propane, 2-chloro-}	10,000	1,390	**
108-23-6	Isopropyl Chloroformate {Carbonochloridic Acid, 1-methylethyl Ester}	15,000	1,664	0.1
126-98-7	Methacrylonitrile {2-propenenitrile, 2-methyl-} {Methylacrylonitrile}	10,000	1,497	0.0027
74-82-8	Methane	10,000	2,853	**
74-87-3	Methyl Chloride {Chloromethane} {Methane, Chloro-}	10,000	1,202	0.82
79-22-1	Methyl Chloroformate {Carbonochloridic Acid, Methyl ester} {Methyl Chlorocarbonate}	5,000	489	0.0019
115-10-6	Methyl Ether {Methane, Oxybis-}	10,000	1,655	**
107-31-3	Methyl Formate {Formic Acid, Methyl Ester}	10,000	1,235	**
60-34-4	Methyl Hydrazine	15,000	2,066	0.0094
624-83-9	Methyl Isocyanate {Methane, Isocyanato-}	10,000	1,248	0.0012
74-93-1	Methyl Mercaptan {Methanethiol} {Thiomethanol}	10,000	1,343	0.049
556-64-9	Methyl Thiocyanate {Thiocyanic Acid, Methyl Ester}	20,000	2,244	0.085
74-89-5	Methylamine {Methanamine} {Monomethylamine}	10,000	1,729	**
75-79-6	Methyltrichlorosilane {Silane, Trichloromethyl-}	5,000	472	0.018
13463-39-3	Nickel Carbonyl {Nickel Tetracarbonyl}	1,000	91	0.00067

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7697-37-2	Nitric Acid ( $\geq 80\%$ )	15,000	1,196	0.026
10102-43-9	Nitric Oxide {Nitrogen Oxide (NO)}	10,000	943	0.031
8014-95-7	Oleum (Fuming Sulfuric Acid) {Sulfuric Acid, with Sulfur Trioxide}	10,000	608	0.01
109-66-0	Pentane	10,000	1,914	**
79-21-0	Peracetic Acid {Ethaneperoxoic Acid} {Peroxyacetic Acid}	10,000	977	0.0045
594-42-3	Perchloromethylmercaptan {Methanesulfonyl Chloride, Trichloro-}	10,000	707	0.0076
75-44-5	Phosgene {Carbonic Dichloride} {Carbonyl Chloride}	500	42	0.00081
7803-51-2	Phosphine {Hydrogen Phosphide}	5,000	803	0.0035
10025-87-3	Phosphorus Oxychloride {Phosphoryl Chloride}	5,000	364	0.003
7719-12-2	Phosphorus Trichloride {Phosphorous Trichloride}	15,000	1,142	0.028
110-89-4	Piperidine	15,000	2,085	0.022
463-49-0	Propadiene {1,2-propadiene}	10,000	**	**
74-98-6	Propane	10,000	2,381	**
107-12-0	Propionitrile {Ethyl Cyanide} {Propanenitrile}	10,000	1,494	0.0037
109-61-5	Propyl Chloroformate {Carbonochloridic Acid, Propylester}	15,000	1,649	0.01
115-07-1	Propylene {1-propene}	10,000	1,968	**
75-56-9	Propylene oxide {oxirane, methyl-}	10,000	1,395	**
75-55-8	Propyleneimine {Aziridine, 2-methyl}	10,000	1,485	0.12
74-99-7	Propyne {1-propyne}	10,000	1,697	**
7803-62-5	Silane	10,000	1,762	**
7446-09-5	Sulfur Dioxide (Anhydrous)	5,000	418	0.0078
7783-60-0	Sulfur Tetrafluoride {Sulfur Fluoride, (Sf4) (T-4)-}	2,500	154	0.0092
7446-11-9	Sulfur Trioxide {Sulfuric Anhydride}	10,000	624	0.01
116-14-3	Tetrafluoroethylene {Ethene, Tetrafluoro-}	10,000		
75-74-1	Tetramethyllead {Plumbane, Tetramethyl-}	10,000	601	0.004
75-76-3	Tetramethylsilane (Silane, Tetramethyl-}	10,000	1,849	**
509-14-8	Tetranitromethane {Methane, Tetranitro-}	10,000	732	0.004
7550-45-0	Titanium Tetrachloride {Titanium Chloride (TiCl4) T-4}	2,500	174	0.02
584-84-9	Toluene 2,4-diisocyanate {Benzene 2,4-diisocyanato-1-methyl-}	10,000	979	0.007
91-08-7	Toluene 2,6-diisocyanate {Benzene, 1,3-diisocyanato-2-methyl-}	10,000	978	0.007
26471-62-5	Toluene Diisocyanate (Unspecified Isomer) {Benzene, 1,3-diisocyanatomethyl-}	10,000	1,007	0.007
10025-78-2	Trichorosilane {Silane, Trichloro-}	10,000	892	**
79-38-9	Trifluorochloroethylene {Ethene, Chlorotrifluoro-}	10,000	917	**
75-50-3	Trimethylamine {Methanamine, N, n-dimethyl-}	10,000	1,893	**
75-77-4	Trimethylchlorosilane (Silane, Chlorotrimethyl-}	10,000	1,403	0.05
108-05-4	Vinyl Acetate Monomer {Acetic Acid Ethenyl Ester}	15,000	1,929	0.26
689-97-4	Vinyl Acetylene (1-buten-3-yne}	10,000	1,689	**
75-01-4	Vinyl Chloride {Ethene, Chloro-}	10,000	1,237	**
109-92-2	Vinyl Ethyl Ether (Ethene, Ethoxy-)	10,000	1,579	**
75-02-5	Vinyl Fluoride {Ethene, Fluoro-}	10,000	1,695	**
107-25-5	Vinyl Methyl Ether {Ethene, Methoxy-}	10,000	1,542	**
75-35-4	Vinylidene Chloride {Ethene, 1,1-dichloro-} {1,1-dichlorethylene}	10,000	990	**
75-38-7	Vinylidene Fluoride {Ethene, 1,1-difluoro-}	10,000	**	**

**\*\* Amount not applicable.**