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| Process Risk Screening Tool |

**Use this tool to determine the applicability of the PSM Standard requirements.**

**(Refer to requirement 1.1.1)**

1. Identify each chemical process at the business area and document the process boundary description.
2. Evaluate one process at a time. Using the list of questions below, answer each question either “Yes” or “No.”
3. If any one of the questions is answered as “Yes” then the process is classified as high risk.
4. If the process is classified as high risk, then any equipment associated with it, e.g., utilities, safety systems, etc., whose malfunction or failure could cause a process safety event, or is intended to contain/mitigate these events, must be identified and also included in the boundary documentation.
5. List any additional considerations that could impact the evaluation such as the complexity of the process, sensitive public or environmental receptors that are nearby, or location near densely populated areas for example.
6. Document all answers and decisions and the process boundary for line management to review and approve and maintain documentation of applicability for future reference including compliance audits.

GIPSM APPLICABILITY QUESTIONS

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| Process Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Site/Location: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Clearly identify the process equipment boundary using a brief Process Overview/Description and drawing (include P&IDs or schematics or pictures, if possible). Use the definition of “process” below to clearly document your process equipment boundary.  Process – A defined equipment boundary involving highly hazardous chemicals/materials when any use, storage, manufacture, handling, or on-site movement of such chemicals/materials or combination of these activities is involved. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

| ITEM | HAZARD SCREENING QUESTIONS | YES | NO |
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|  | **Flammability Hazards:** (refer to the Lilly Laboratory Labeling Code or manufacturers supplied MSDS for Flammability rating on the MSDS) – for mixtures use the total weight of mixture and use the Flammability rating of the mixture |  |  |
| 1. | Does the process contain more than 350 lbs. (159 kg) of a material with a Flammability rating of 4? (State Material(s) and Max. Inventory)  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |
| 2. | Does the process contain more than 10,000 lbs. (4,535 kg) of a material with a Flammability rating of 3? (State Material(s) and Max. Inventory)  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |
| 3. | Does the process contain more than 10,000 lbs. (4,535 kg) of a material with a Flammability rating of 2 or 1 that is above its flash point? (State Material Name(s) and Max. Inventory)  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |
| 4. | Does the process contain more than 350 lbs. (159 kg) of a material with a Flammability rating of 1, 2 or 3 that is above its atmospheric boiling point? (State Material(s) and Max. Inventory)  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |
|  | **Explosion Hazards:** (refer to the Lilly Laboratory Labeling Code or manufactures supplied MSDS for Reactivity rating and Specialty rating on the MSDS) |  |  |
| 5. | Does the process contain more than 25 lbs. (11 kg) of a material with a Reactivity rating of 4? (State Material(s) and Max. Inventory)  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |
| 6. | Does the process contain more than 200 lbs. (91 kg) of a material with a Reactivity rating of 3? (State Material(s) and Max. Inventory)  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |
| 7. | Does the process contain more than 890 lbs. (404 kg) of a material with a Reactivity rating of 2 that is heated to within 50C of any known or suspected decomposition point or point where other hazards occur? (State Material(s) and Max. Inventory)  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |
| 8. | Does the process contain more than 1,000 lbs. (454 kg) of a material with a Specialty rating of Oxidizer? (State Material(s) and Max. Inventory)  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |
| 9. | Does the process contain more than 1,800 lbs. (816 kg) of a material with a Specialty rating of Water Reactive? (State Material(s) and Max. Inventory)  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |
|  | **Runaway Chemical Reaction Hazards:** |  |  |
| 10. | Does the process contain more than 650 gal. (2,460 l) and involve a reaction or potential reaction (one that could be caused by inadvertent mixing of materials) that is moderately to severely exothermic and an easy reaction to control? (State Material(s) and Max. Inventory)  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |
| 11. | Does the process contain more than 80 gal. (303 l) and involve a reaction or potential reaction (one that could be caused by inadvertent mixing of materials) that is moderately to severely exothermic and a difficult reaction to control? (State Material(s) and Max. Inventory)  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |
|  | **Toxic Hazards:** (refer to the Lilly Laboratory Labeling Code or manufacturers supplied MSDS for Health rating on the MSDS) – for mixtures only use the weight of the toxic component in the mixture and only use the partial pressure of the toxic component in the mixture. If more than one toxic component is in the mixture then use the combined weights and partial pressures of all of the toxic components. See the wiki guidance library for more information and examples. |  |  |
| 12. | Does the process contain more than 6 lbs. (2.7 kg) of a gas with a Health rating of 4? (State Material(s) and Max. Inventory)  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |
| 13. | Does the process contain more than 18 lbs. (8 kg) of a highly volatile liquid with a Health rating of 4? (State Material(s) and Max. Inventory).  Note - A liquid with a vapor pressure that is between 100 and 760 mm Hg at 68°F (20°C) is considered a highly volatile liquid.  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |
| 14. | Does the process contain more than 230 lbs. (104 kg) of a volatile liquid with a Health rating of 4? (State Material(s) and Max. Inventory)  Note - A liquid with a vapor pressure that is between 10 and 99 mm Hg at 68°F (20°C) is considered a volatile liquid.  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |
| 15. | Does the process contain more than 350 lbs. (159 kg) of a gas with a Health rating of 3? (State Material(s) and Max. Inventory)  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |
| 16. | Does the process contain more than 880 lbs. (399 kg) of a highly volatile liquid with a Health rating of 3? (State Material(s) and Max. Inventory)  Note - A liquid with a vapor pressure that is between 100 and 760 mm Hg at 68°F (20°C) is considered a highly volatile liquid.  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |
| 17. | Does the process contain more than 15,000 lbs. (6,803 kg) of a volatile liquid with a Health rating of 3? (State Material(s) and Max. Inventory)  Note - A liquid with a vapor pressure that is between 10 and 99 mm Hg at 68°F (20°C) is considered a volatile liquid.  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |
| 18. | Does the process contain more than 10,000 lbs. (4,535 kg) of a gas with a Health rating of 2? (State Material(s) and Max. Inventory)  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |
| 19. | Does the process contain more than 15,000 lbs. (6,803 kg) of a highly volatile liquid with a Health rating of 2? (State Material(s) and Max. Inventory)  Note - A liquid with a vapor pressure that is between 100 and 760 mm Hg at 68°F (20°C) is considered a highly volatile liquid.  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |
|  | **Proximity Hazards:** |  |  |
| 20. | Is this process located such that a release of a hazardous chemical from a nearby high risk process could cause a release of a hazardous chemical from this process or interfere with mitigating a release?  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |

Note: Processes that use flammable gases from continuous systems as fuels (such as natural gas) for heating, steam generation, etc. do not need to be included in the GIPSM program.

Additional Considerations: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Does the process qualify as PSM High Risk, according to the Lilly’s Process Risk Screening Tool? (Indicate Yes or No) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

If Yes, list the process and business unit \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Reviewed/Prepared by: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_

Approved by: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_

**Definitions:**

**Highly Volatile Liquid –** A liquid with a vapor pressure that is between 100 and 760 mm Hg at 68°F (20°C).

**Volatile Liquid** – A liquid with a vapor pressure that is between 10 and 99 mm Hg at 68°F (20°C).

**Non-Volatile Liquid –** A liquid with a vapor pressure that is less than 10 mm Hg at 68°F (20°C).

**Flammable Liquid –** A liquid having a flash point below 100°F (37.8°C).

**Highly Flammable Substance –** Liquids or gases with a Lilly Laboratory Labeling Code rating of 4 for Flammability. These liquids have a flash point below 73°F (22.8°C) and a boiling point below 100°F (37.8°C).

**Note:** NFPA 704 Hazard Rating Codes may be used in place of Lilly Laboratory Labeling Codes for Flammability, Reactivity, Specialty, and Health ratings.