Hensley, Dave

From: Hensley, Dave
Sent: Wednesday, December 03, 2014 12:12 PM
To: 'Kevin.L.Roberts@usa.dupont.com'
Subject: EPA Risk Management Program Inspection 12/15-19/2014
Attachments: EPARMP_List_of_documents_Dupont.docx; RMP Level 3 Checklist.pdf

Mr. Roberts;

My name is Dave Hensley. I do Risk Management Program inspections for the U.S. Environmental Protection Agency Region 6. I have been asked to do an inspection at your facility. The inspection is planned for December 15 to 19, 2014. I will be arriving at your facility at approximately 1:00 PM on December 15, 2014. This inspection will cover the requirements of the Clean Air Act Section 112(r) and the Chemical Accident Prevention Provisions (40 CFR Part 68). The scope of this inspection may include, but is not limited to: reviewing and obtaining copies of documents and records; interviews and taking of statements; reviewing of chemical storage, handling, processing, and use; taking samples and photographs; and any other inspection activities necessary to determine compliance with the Act.

Attached please find a checklist that I will use to guide the inspection, and a list of documents that I know I will need to review during the inspection. This list of documents is not intended to be all inclusive but a starting point.

During the inspection I know I will need to talk to people who can tell me about your worst case scenario determination, process hazard analysis (PHA) program, incident investigation program, management of change program, mechanical integrity program, training program, and emergency response program.

If there is an employee union at your facility, I need to extend an invitation to them to participate in the inspection. Please provide me the contact information for appropriate employee representatives.

Feel free to contact me if you have questions or concerns.

Sincerely,

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December 3, 2014

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List of documents requested by the EPA for review during the inspection:

1. Copy of Management System (68.15)
2. Process flow diagram (68.65)
3. Current Title V Permit (68.215)
4. Worst case scenario documentation (68.39)
5. A list of Incident Reports/Investigations for all incidents which resulted in, or could reasonably have resulted in a catastrophic release of a regulated substance over the last 3 years (68.81).
    a. Incident Reports/Investigations for selected incidents (68.81)
    b. Including but not limited to:
        i. November 15, 2014, methyl mercaptan release
        ii. September 22, 2014, sulfur dioxide release
        iii. August 8, 2013, chlorine release
        iv. January 23, 2012, hydrofluoric acid release
        v. March 23, 2011, chlorine release
6. Process Safety Information (68.65)
7. Most recent and previous Process Hazard Analysis (PHA) for the Lannate (R) - API, and Fluoroproducts RMP units
8. PHA Schedule of when the last two were done, and the next PHA will be done, for all RMP units.
9. Written Procedure for Process Hazard Analysis (PHA) Program
10. Annual certifications of all operating procedures in RMP units (68.69c)
11. Written procedures to manage changes (68.75)
12. List of last year's management of changes (68.75)
13. Risk management program compliance audits (two most recent) (68.79)
14. Mechanical Integrity program written procedure. Including fixed pipe circuits, tanks and rotating equipment and external inspections on all RMP units (68.73b).
15. A list of any out of date inspections on RMP unit equipment (68.73d).
16. Employee participation plan (68.83)
17. Hot work permits from November 15, 2014 (68.85)
18. Emergency response plan (68.95)

RMP Program Level 3 Process Checklist **Facility Name: _____**

Section A – Management [68.15]

Management system developed and implemented as provided in 40 CFR 68.15? Comments:	☐S	☐M	☐U	☐N/A
Has the owner or operator:				
1. Developed a management system to oversee the implementation of the risk management program elements? [68.15(a)]	☐Y	☐N	☐N/A	
2. Assigned a qualified person or position that has the overall responsibility for the development, implementation, and integration of the risk management program elements? [68.15(b)]	☐Y	☐N	☐N/A	
3. Documented other persons responsible for implementing individual requirements of the risk management program and defined the lines of authority through an organization chart or similar document? [68.15(c)]	☐Y	☐N	☐N/A	

Section B: Hazard Assessment [68.20-68.42]

Hazard assessment conducted and documented as provided in 40 CFR 68.20-68.42? Comments:	☐S	☐M	☐U	☐N/A
Hazard Assessment: Offsite consequence analysis parameters [68.22]				
1. Used the following endpoints for offsite consequence analysis for a worst-case scenario: [68.22(a)] ☐ For toxics: the endpoints provided in Appendix A of 40 CFR Part 68? [68.22(a)(1)] ☐ For flammables: an explosion resulting in an overpressure of 1 psi? [68.22(a)(2)(i)]; or ☐ For flammables: a fire resulting in a radiant heat/exposure of 5 kw/m^2 for 40 seconds? [68.22(a)(2)(ii)] ☐ For flammables: a concentration resulting in a lower flammability limit, as provided in NFPA documents or other generally recognized sources? [68.22(a)(2)(iii)]	☐Y	☐N	☐N/A	
2. Used the following endpoints for offsite consequence analysis for an alternative release scenario: [68.22(a)] ☐ For toxics: the endpoints provided in Appendix A of 40 CFR Part 68? [68.22(a)(1)] ☐ For flammables: an explosion resulting in an overpressure of 1 psi? [68.22(a)(2)(i)] ☐ For flammables: a fire resulting in a radiant heat/exposure of 5 kw/m^2 for 40 seconds? [68.22(a)(2)(ii)] ☐ For flammables: a concentration resulting in a lower flammability limit, as provided in NFPA documents or other generally recognized sources? [68.22(a)(2)(iii)]	☐Y	☐N	☐N/A	
3. Used appropriate wind speeds and stability classes for the release analysis? [68.22(b)]	☐Y	☐N	☐N/A	
4. Used appropriate ambient temperature and humidity values for the release analysis? [68.22(c)]	☐Y	☐N	☐N/A	
5. Used appropriate values for the height of the release for the release analysis? [68.22(d)]	☐Y	☐N	☐N/A	
6. Used appropriate surface roughness values for the release analysis? [68.22(e)]	☐Y	☐N	☐N/A	
7. Do tables and models, used for dispersion analysis of toxic substances, appropriately account for dense or neutrally buoyant gases? [68.22(f)]	☐Y	☐N	☐N/A	
8. Were liquids, other than gases liquefied by refrigeration only, considered to be released at the highest daily maximum temperature, based on data for the previous three years appropriate for a stationary source, or at process temperature, whichever is higher? [68.22(g)]	☐Y	☐N	☐N/A	
Hazard Assessment: Worst-case release scenario analysis [68.25]				
9. Analyzed and reported in the RMP one worst-case release scenario estimated to create the greatest distance to an endpoint resulting from an accidental release of a regulated toxic substance from covered processes under worst-case conditions? [68.25(a)(2)(i)]	☐Y	☐N	☐N/A	

10. Analyzed and reported in the RMP one worst-case release scenario estimated to create the greatest distance to an endpoint resulting from an accidental release of a regulated flammable substance from covered processes under worst-case conditions? [68.25(a)(2)(ii)]	☐Y ☐N ☐N/A
11. Analyzed and reported in the RMP additional worst-case release scenarios for a hazard class if the worst-case release from another covered process at the stationary source potentially affects public receptors different from those potentially affected by the worst-case release scenario developed under 68.25(a)(2)(i) or 68.25(a)(2)(ii)? [68.25(a)(2)(iii)]	☐Y ☐N ☐N/A
12. Has the owner or operator determined the worst-case release quantity to be the greater of the following: [68.25(b)] ☐ If released from a vessel, the greatest amount held in a single vessel, taking into account administrative controls that limit the maximum quantity? [68.25(b)(1)] ☐ If released from a pipe, the greatest amount held in the pipe, taking into account administrative controls that limit the maximum quantity? [68.25(b)(2)]	☐Y ☐N ☐N/A
13.a. Has the owner or operator for <u>toxic substances</u> that are <u>normally gases</u> at <u>ambient temperature and handled as a gas or liquid under pressure</u>:	
13.a.(1) Assumed the whole quantity in the vessel or pipe would be released as a gas over 10 minutes? [68.25(c)(1)]	☐Y ☐N ☐N/A
13.a.(2) Assumed the release rate to be the total quantity divided by 10, if there are no passive mitigation systems in place? [68.25(c)(1)]	☐Y ☐N ☐N/A
13.b. Has the owner or operator for <u>toxic gases</u> handled as <u>refrigerated liquids at ambient pressure</u>:	
13.b.(1) Assumed the substance would be released as a gas in 10 minutes, if not contained by passive mitigation systems or if the contained pool would have a depth of 1 cm or less? [68.25(c)(2)(i)]	☐Y ☐N ☐N/A
13.b.(2) If released substance would be contained by passive mitigation systems in a pool with a depth > 1 cm; ☐ Assumed the quantity in the vessel or pipe (as determined per 68.25(b)) would be spilled instantaneously to form a liquid pool? [68.25(c)(2)(ii)] ☐ Calculated the volatility rate at the boiling point of the substance and at the conditions specified in 68.25(d)? [68.25(c)(2)(ii)]	☐Y ☐N ☐N/A
13.c. Has the owner or operator for <u>toxic substances</u> that are <u>normally liquids at ambient temperature</u>:	
13.c.(1) Assumed the quantity in the vessel or pipe would be spilled instantaneously to form a liquid pool? [68.25(d)(1)]	☐Y ☐N ☐N/A
13.c.(2) Determined the surface area of the pool by assuming that the liquid spreads to 1 cm deep, if there is no passive mitigation system in place that would serve to contain the spill and limit the surface area, or if passive mitigation is in place, was the surface area of the contained liquid used to calculate the volatilization rate? [68.25(d)(1)(i)]	☐Y ☐N ☐N/A
13.c.(3) Taken into account the actual surface characteristics, if the release would occur onto a surface that is not paved or smooth? [68.25(d)(1)(ii)]	☐Y ☐N ☐N/A
13.c.(4) Determined the volatilization rate by accounting for the highest daily maximum temperature in the past three years, the temperature of the substance in the vessel, and the concentration of the substance if the liquid spilled is a mixture or solution? [68.25(d)(2)]	☐Y ☐N ☐N/A
13.c.(5) Determined the rate of release to air from the volatilization rate of the liquid pool? [68.25(d)(3)]	☐Y ☐N ☐N/A
13.c.(6) Determined the rate of release to air by using the methodology in the RMP Offsite Consequence Analysis Guidance, any other publicly available techniques that account for the modeling conditions and are recognized by industry as applicable as part of current practices, or proprietary models that account for the modeling conditions may be used provided the owner or operator allows the implementing agency access to the model and describes model features and differences from publicly available models to local emergency planners upon request? [68.25(d)(3)] What modeling technique did the owner or operator use? [68.25(g)] _____	☐Y ☐N ☐N/A

13.d. Has the owner or operator for flammables:			
13.d.(1) Assumed the quantity in a vessel(s) of flammable gas held as a gas or liquid under pressure or refrigerated gas released to an undiked area vaporizes resulting in a vapor cloud explosion? [68.25(e)]	☐Y	☐N	☐N/A
13.d.(2) For refrigerated gas released to a contained area or liquids released below their atmospheric boiling point, assumed the quantity volatilized in 10 minutes results in a vapor cloud? [68.25(f)]	☐Y	☐N	☐N/A
13.d.(3) Assumed a yield factor of 10% of the available energy is released in the explosion for determining the distance to the explosion endpoint, if the model used is based on TNT-equivalent methods? [68.25(e)]	☐Y	☐N	☐N/A
14. Used the parameters defined in 68.22 to determine distance to the endpoints? [68.25(g)]	☐Y	☐N	☐N/A
15. Determined the rate of release to air by using the methodology in the RMP Offsite Consequence Analysis Guidance, any other publicly available techniques that account for the modeling conditions and are recognized by industry as applicable as part of current practices, or proprietary models that account for the modeling conditions may be used provided the owner or operator allows the implementing agency access to the model and describes model features and differences from publicly available models to local emergency planners upon request? [68.25(g)] What modeling technique did the owner or operator use? [68.25(g)] _____	☐Y	☐N	☐N/A
16. Ensured that the passive mitigation system, if considered, is capable of withstanding the release event triggering the scenario and will still function as intended? [68.25(h)]	☐Y	☐N	☐N/A
17. Considered also the following factors in selecting the worst-case release scenarios: [68.25(i)] ☐ Smaller quantities handled at higher process temperature or pressure? [68.25(i)(1)] ☐ Proximity to the boundary of the stationary source? [68.25(i)(2)]	☐Y	☐N	☐N/A
Hazard Assessment: Alternative release scenario analysis [68.28]			
18. Identified and analyzed at least one alternative release scenario for each regulated toxic substance held in a covered process(es) and at least one alternative release scenario to represent all flammable substances held in covered processes? [68.28(a)]	☐Y	☐N	☐N/A
19. Selected a scenario: [68.28(b)] ☐ That is more likely to occur than the worst-case release scenario under 68.25? [68.28(b)(1)(i)] ☐ That will reach an endpoint off-site, unless no such scenario exists? [68.28(b)(1)(ii)]	☐Y	☐N	☐N/A
20. Considered release scenarios which included, but are not limited to, the following: [68.28(b)(2)] ☐ Transfer hose releases due to splits or sudden hose uncoupling? [68.28(b)(2)(i)] ☐ Process piping releases from failures at flanges, joints, welds, valves and valve seals, and drains or bleeds? [68.28(b)(2)(ii)] ☐ Process vessel or pump releases due to cracks, seal failure, or drain, bleed, or plug failure? [68.28(b)(2)(iii)] ☐ Vessel overfilling and spill, or overpressurization and venting through relief valves or rupture disks? [68.28(b)(2)(iv)] ☐ Shipping container mishandling and breakage or puncturing leading to a spill? [68.28(b)(2)(v)]	☐Y	☐N	☐N/A
21. Used the parameters defined in 68.22 to determine distance to the endpoints? [68.28(c)]	☐Y	☐N	☐N/A
22. Determined the rate of release to air by using the methodology in the RMP Offsite Consequence Analysis Guidance, any other publicly available techniques that account for the modeling conditions and are recognized by industry as applicable as part of current practices, or proprietary models that account for the modeling conditions may be used provided the owner or operator allows the implementing agency access to the model and describes model features and differences from publicly available models to local emergency planners upon request? [68.28(c)] What modeling technique did the owner or operator use? [68.25(g)] _____	☐Y	☐N	☐N/A

23. Ensured that the passive and active mitigation systems, if considered, are capable of withstanding the release event triggering the scenario and will be functional? [68.28(d)]	☐Y ☐N ☐N/A
24. Considered the following factors in selecting the alternative release scenarios: [68.28(e)] ☐ The five-year accident history provided in 68.42? [68.28(e)(1)] ☐ Failure scenarios identified under 68.50? [68.28(e)(2)]	☐Y ☐N ☐N/A
Hazard Assessment: Defining off-site impacts–Population [68.30]	
25. Estimated population that would be included in the distance to the endpoint in the RMP based on a circle with the point of release at the center? [68.30(a)]	☐Y ☐N ☐N/A
26. Identified the presence of institutions, parks and recreational areas, major commercial, office, and industrial buildings in the RMP? [68.30(b)]	☐Y ☐N ☐N/A
27. Used most recent Census data, or other updated information to estimate the population? [68.30(c)]	☐Y ☐N ☐N/A
28. Estimated the population to two significant digits? [68.30(d)]	☐Y ☐N ☐N/A
Hazard Assessment: Defining off-site impacts–Environment [68.33]	
29. Identified environmental receptors that would be included in the distance to the endpoint based on a circle with the point of release at the center? [68.33(a)]	☐Y ☐N ☐N/A
30. Relied on information provided on local U.S.G.S. maps, or on any data source containing U.S.G.S. data to identify environmental receptors? [Source may have used LandView to obtain information] [68.33(b)]	☐Y ☐N ☐N/A
Hazard Assessment: Review and update [68.36]	
31. Reviewed and updated the off-site consequence analyses at least once every five years? [68.36(a)]	☐Y ☐N ☐N/A
32. Completed a revised analysis and submit a revised RMP within six months of a change in processes, quantities stored or handled, or any other aspect that might reasonably be expected to increase or decrease the distance to the endpoint by a factor of two or more? [68.36(b)]	☐Y ☐N ☐N/A
Hazard Assessment: Documentation [68.39]	
33. For worst-case scenarios: a description of the vessel or pipeline and substance selected, assumptions and parameters used, the rationale for selection, and anticipated effect of the administrative controls and passive mitigation on the release quantity and rate? [68.39(a)]	☐Y ☐N ☐N/A
34. For alternative release scenarios: a description of the scenarios identified, assumptions and parameters used, the rationale for the selection of specific scenarios, and anticipated effect of the administrative controls and mitigation on the release quantity and rate? [68.39(b)]	☐Y ☐N ☐N/A
35. Documentation of estimated quantity released, release rate, and duration of release? [68.39(c)]	☐Y ☐N ☐N/A
36. Methodology used to determine distance to endpoints? [68.39(d)]	☐Y ☐N ☐N/A
37. Data used to estimate population and environmental receptors potentially affected? [68.39(e)]	☐Y ☐N ☐N/A
Hazard Assessment: Five-year accident history [68.42]	
38. Has the owner or operator included all accidental releases from covered processes that resulted in deaths, injuries, or significant property damage on site, or known offsite deaths, injuries, evacuations, sheltering in place, property damage, or environmental damage? [68.42(a)]	☐Y ☐N ☐N/A

39. Has the owner or operator reported the following information for each accidental release: [68.42(b)] ☐ Date, time, and approximate duration of the release? [68.42(b)(1)] ☐ Chemical(s) released? [68.42(b)(2)] ☐ Estimated quantity released in pounds and percentage weight in a mixture (toxics)? [68.42(b)(3)] ☐ NAICS code for the process? [68.42(b)(4)] ☐ The type of release event and its source? [68.42(b)(5)] ☐ Weather conditions (if known)? [68.42(b)(6)] ☐ On-site impacts? [68.42(b)(7)] ☐ Known offsite impacts? [68.42(b)(8)] ☐ Initiating event and contributing factors (if known)? [68.42(b)(9)] ☐ Whether offsite responders were notified (if known)? [68.42(b)(10)] ☐ Operational or process changes that resulted from investigation of the release? [68.42(b)(11)]	☐Y ☐N ☐N/A

Section C: Prevention Program

Implemented the Program 3 prevention requirements as provided in 40 CFR 68.65 - 68.87? Comments:	☐S ☐M ☐U ☐N/A

Prevention Program- Safety information [68.65]

1. Has the owner or operator compiled written process safety information, which includes information pertaining to the hazards of the regulated substances used or produced by the process, information pertaining to the technology of the process, and information pertaining to the equipment in the process, before conducting any process hazard analysis required by the rule? [68.65(a)] Does the process safety information contain the following for hazards of the substances: [68.65(b)] ☐ Material Safety Data Sheets (MSDS) that meet the requirements of the OSHA Hazard Communication Standard [29 CFR 1910.1200(g)]? [68.48(a)(1)] ☐ Toxicity information? [68.65(b)(1)] ☐ Permissible exposure limits? [68.65(b)(2)] ☐ Physical data? [68.65(b)(3)] ☐ Reactivity data? [68.65(b)(4)] ☐ Corrosivity data? [68.65(b)(5)] ☐ Thermal and chemical stability data? [68.65(b)(6)] ☐ Hazardous effects of inadvertent mixing of materials that could foreseeably occur? [68.65(b)(7)]	☐Y ☐N ☐N/A
2. Has the owner documented information pertaining to technology of the process? ☐ A block flow diagram or simplified process flow diagram? [68.65(c)(1)(i)] ☐ Process chemistry? [68.65(c)(1)(ii)] ☐ Maximum intended inventory? [68.65(c)(1)(iii)] ☐ Safe upper and lower limits for such items as temperatures, pressures, flows, or compositions? [68.65(c)(1)(iv)] ☐ An evaluation of the consequences of deviation? [68.65(c)(1)(iv)]	☐Y ☐N ☐N/A

3. Does the process safety information contain the following for the equipment in the process: [68.65(d)(1)] ☐ Materials of construction? 68.65(d)(1)(i)] ☐ Piping and instrumentation diagrams [68.65(d)(1)(ii)] ☐ Electrical classification? [68.65(d)(1)(iii)] ☐ Relief system design and design basis? [68.65(d)(1)(iv)] ☐ Ventilation system design? [68.65(d)(1)(v)] ☐ Design codes and standards employed? [68.65(d)(1)(vi)] ☐ Material and energy balances for processes built after June 21, 1999? [68.65(d)(1)(vii)] ☐ Safety systems? [68.65(d)(1)(viii)]	☐Y ☐N ☐N/A
4. Has the owner or operator documented that equipment complies with recognized and generally accepted good engineering practices? [68.65(d)(2)]	☐Y ☐N ☐N/A
5. Has the owner or operator determined and documented that existing equipment, designed and constructed in accordance with codes, standards, or practices that are no longer in general use, is designed, maintained, inspected, tested, and operating in a safe manner? [68.65(d)(3)]	☐Y ☐N ☐N/A
Prevention Program- Process Hazard Analysis [68.67]	
6. Has the owner or operator performed an initial process hazard analysis (PHA), and has this analysis identified, evaluated, and controlled the hazards involved in the process? [68.67(a)]	☐Y ☐N ☐N/A
7. Has the owner or operator determined and documented the priority order for conducting PHAs, and was it based on an appropriate rationale? [68.67(a)]	☐Y ☐N ☐N/A
8. Has the owner used one or more of the following technologies to conduct process PHA: [68.67(b)] ☐ What-if? [68.67(b)(1)] ☐ Checklist? [68.67(b)(2)] ☐ What-if/Checklist? [68.67(b)(3)] ☐ Hazard and Operability Study (HAZOP) [68.67(b)(4)] ☐ Failure Mode and Effects Analysis (FMEA) [68.67(b)(5)] ☐ Fault Tree Analysis? [68.67(b)(6)] ☐ An appropriate equivalent methodology? [68.67(b)(7)]	☐Y ☐N ☐N/A
9. Did the PHA address: ☐ The hazards of the process? [68.67(c)(1)] ☐ Identification of any incident that had a likely potential for catastrophic consequences? [68.67(c)(2)] ☐ Engineering and administrative controls applicable to hazards and interrelationships?[68.67(c)(3)] ☐ Consequences of failure of engineering and administrative controls? [68.67(c)(4)] ☐ Stationary source siting? [68.67(c)(5)] ☐ Human factors? [68.67(c)(6)] ☐ An evaluation of a range of the possible safety and health effects of failure of controls? [68.67(c)(7)]	☐Y ☐N ☐N/A
10. Was the PHA performed by a team with expertise in engineering and process operations and did the team include appropriate personnel? [68.67(d)]	☐Y ☐N ☐N/A

11. Has the owner or operator established a system to promptly address the team's findings and recommendations; assured that the recommendations are resolved in a timely manner and documented; documented what actions are to be taken; completed actions as soon as possible; developed a written schedule of when these actions are to be completed; and communicated the actions to operating, maintenance, and other employees whose work assignments are in the process and who may be affected by the recommendations? [68.67(e)]	☐Y ☐N ☐N/A
12. Has the PHA been updated and revalidated by a team every five years after the completion of the initial PHA to assure that the PHA is consistent with the current process? [68.67(f)]	☐Y ☐N ☐N/A
13. Has the owner or operator retained PHAs and updates or revalidations for each process covered, as well as the resolution of recommendations for the life of the process? [68.67(g)]	☐Y ☐N ☐N/A
Prevention Program- Operating procedures [68.69]	
14. Has the owner or operator developed and implemented written operating procedures that provide instructions or steps for conducting activities associated with each covered process consistent with the safety information? [68.69(a)]	☐Y ☐N ☐N/A
15 Do the procedures address the following: [68.69(a)] <u>Steps for each operating phase: [68.69(a)(1)]</u> ☐ Initial Startup? [68.69(a)(1)(i)] ☐ Normal operations? [68.69(a)(1)(ii)] ☐ Temporary operations? [68.69((a)(1)(iii)] ☐ Emergency shutdown including the conditions under which emergency shutdown is required, and the assignment of shutdown responsibility to qualified operators to ensure that emergency shutdown is executed in a safe and timely manner? [68.69(a)(1)(iv)] ☐ Emergency operations? [68.69(a)(1)(v)] ☐ Normal shutdown? [68.68(a)(1)(vi)] ☐ Startup following a turnaround, or after emergency shutdown? [68.69(a)(1)(vii)] <u>Operating limits: [68.69(a)(2)]</u> ☐ Consequences of deviations [68.69(a)(2)(i)] ☐ Steps required to correct or avoid deviation? [68.69(a)(2)(ii)] <u>Safety and health considerations: [68.69(a)(3)]</u> ☐ Properties of, and physical hazards presented by, the chemicals used in the process [68.69(a)(3)(i)] ☐ Precautions necessary to prevent exposure, including engineering controls, administrative controls, and personal protective equipment? [68.69(a)(3)(ii)] ☐ Control measures to be taken if physical contact or airborne exposure occurs? [68.69(a)(3)(iii)] ☐ Quality control for raw materials and control of hazardous chemical inventory levels? [68.69(a)(3)(iv)] ☐ Any special or unique hazards? [68.69(a)(3)(v)] ☐ <u>Safety systems and their functions? [68.69(a)(4)]</u>	☐Y ☐N ☐N/A
16. Are operating procedures readily accessible to employees who are involved in a process? [68.69(b)]	☐Y ☐N ☐N/A
17. Has the owner or operator certified annually that the operating procedures are current and accurate and that procedures have been reviewed as often as necessary? [68.69(c)]	☐Y ☐N ☐N/A
18. Has the owner or operator developed and implemented safe work practices to provide for the control of hazards during specific operations, such as lockout/tagout? [68.69(d)]	☐Y ☐N ☐N/A

RMP Program Level 3 Process Checklist **Facility Name: _____**

Prevention Program - Training [68.71]	
19 Has each employee involved in operating a process, and each employee before being involved in operating a newly assigned process, been initially trained in an overview of the process and in the operating procedures? [68.71(a)(1)]	☐Y ☐N ☐N/A
20. Did initial training include emphasis on safety and health hazards, emergency operations including shutdown, and safe work practices applicable to the employee's job tasks? [68.71(a)(1)]	☐Y ☐N ☐N/A
21. In lieu of initial training for those employees already involved in operating a process on June 21, 1999, an owner or operator may certify in writing that the employee has the required knowledge, skills, and abilities to safely carry out the duties and responsibilities as specified in the operating procedures [68.71(a)(2)]	☐Y ☐N ☐N/A
22. Has refresher training been provided at least every three years, or more often if necessary, to each employee involved in operating a process to assure that the employee understands and adheres to the current operating procedures of the process? [68.71(b)]	☐Y ☐N ☐N/A
23, Has owner or operator ascertained and documented in record that each employee involved in operating a process has received and understood the training required? [68.71(c)]	☐Y ☐N ☐N/A
24. Does the prepared record contain the identity of the employee, the date of the training, and the means used to verify that the employee understood the training? [68.71(c)]	☐Y ☐N ☐N/A
Prevention Program - Mechanical Integrity [68.73]	
25. Has the owner or operator established and implemented written procedures to maintain the on-going integrity of the process equipment listed in 68.73(a)? [68.73(b)]	☐Y ☐N ☐N/A
26. Has the owner or operator trained each employee involved in maintaining the on-going integrity of process equipment? [68.73(c)]	☐Y ☐N ☐N/A
27. Performed inspections and tests on process equipment? [68.73(d)(1)]	☐Y ☐N ☐N/A
28. Followed recognized and generally accepted good engineering practices for inspections and testing procedures? [68.73(d)(2)]	☐Y ☐N ☐N/A
29. Ensured the frequency of inspections and tests of process equipment is consistent with applicable manufacturers' recommendations, good engineering practices, and prior operating experience? [68.73(d)(3)]	☐Y ☐N ☐N/A
30. Documented each inspection and test that had been performed on process equipment, which identifies the date of the inspection or test, the name of the person who performed the inspection or test, the serial number or other identifier of the equipment on which the inspection or test was performed, a description of the inspection or test performed, and the results of the inspection or test? [68.73(d)(4)]	☐Y ☐N ☐N/A
31. Corrected deficiencies in equipment that were outside acceptable limits defined by the process safety information before further use or in a safe and timely manner when necessary means were taken to assure safe operation? [68.73(e)]	☐Y ☐N ☐N/A
32. Assured that equipment as it was fabricated is suitable for the process application for which it will be used in the construction of new plants and equipment? [68.73(f)(1)]	☐Y ☐N ☐N/A
33. Performed appropriate checks and inspections to assure that equipment was installed properly and consistent with design specifications and the manufacturer's instructions? [68.73(f)(2)]	☐Y ☐N ☐N/A
34. Assured that maintenance materials, spare parts and equipment were suitable for the process application for which they would be used? [68.73(f)(3)]	☐Y ☐N ☐N/A
Prevention Program - Management Of Change [68.75]	
35. Has the owner or operator established and implemented written procedures to manage changes to process chemicals, technology, equipment, and procedures, and changes to stationary sources that affect a covered process? [68.75(a)]	☐Y ☐N ☐N/A

36. Do procedures assure that the following considerations are addressed prior to any change: [68.75(b)] ☐ The technical basis for the proposed change? [68.75(b)(1)] ☐ Impact of change on safety and health? [68.75(b)(2)] ☐ Modifications to operating procedures? [68.75(b)(3)] ☐ Necessary time period for the change? [68.75(b)(4)] ☐ Authorization requirements for the proposed change? [68.75(b)(5)]	☐Y ☐N ☐N/A
37. Were employees, involved in operating a process and maintenance, and contract employees, whose job tasks would be affected by a change in the process, informed of, and trained in, the change prior to start-up of the process or affected parts of the process? [68.75(c)]	☐Y ☐N ☐N/A
38. If a change resulted in a change in the process safety information, was such information updated accordingly? [68.75(d)]	☐Y ☐N ☐N/A
39. If a change resulted in a change in the operating procedures or practices, had such procedures or practices been updated accordingly? [68.75(e)]	☐Y ☐N ☐N/A
Prevention Program - Pre-startup Safety Review [68.77]	
40. If the facility installed a new stationary source, or significantly modified an existing source, (as discussed at 68.77(a)) did it perform a pre-startup safety review prior to the introduction of a regulated substance to a process to confirm: [68.77(b)] ☐ Construction and equipment was in accordance with design specifications? [68.77(b)(1)] ☐ Safety, operating, maintenance, and emergency procedures were in place and were adequate? [68.77(b)(2)] ☐ For new stationary sources, a process hazard analysis had been performed and recommendations had been resolved or implemented before startup? [68.77(b)(3)] ☐ Modified stationary sources meet the requirements contained in management of change? [68.77(b)(3)] ☐ Training of each employee involved in operating a process had been completed? [68.77(b)(4)]	☐Y ☐N ☐N/A
Prevention Program - Compliance audits [68.79]	
41. Has the owner or operator certified that the stationary source has evaluated compliance with the provisions of the prevention program at least every three years to verify that the developed procedures and practices are adequate and being followed? [68.79(a)]	☐Y ☐N ☐N/A
42. Has the audit been conducted by at least one person knowledgeable in the process? [68.79(b)]	☐Y ☐N ☐N/A
43. Are the audit findings documented in a report? [68.79(c)]	☐Y ☐N ☐N/A
44. Has the owner or operator promptly determined and documented an appropriate response to each of the findings of the audit and documented that deficiencies had been corrected? [68.79(d)]	☐Y ☐N ☐N/A
45. Has the owner or operator retained the two most recent compliance reports? [68.79(e)]	☐Y ☐N ☐N/A
Prevention Program - Incident investigation [68.81]	
46. Has the owner or operator investigated each incident that resulted in, or could reasonably have resulted in a catastrophic release of a regulated substance? [68.81(a)]	☐Y ☐N ☐N/A
47. Were all incident investigations initiated not later than 48 hours following the incident? [68.81(b)]	☐Y ☐N ☐N/A
48. Was an accident investigation team established and did it consist of at least one person knowledgeable in the process involved, including a contract employee if the incident involved work of a contractor, and other persons with appropriate knowledge and experience to thoroughly investigate and analyze the incident? [68.81(c)]	☐Y ☐N ☐N/A

49. Was a report prepared at the conclusion of every investigation? [68.81(d)]	☐Y ☐N ☐N/A
50. Does every report include: [68.81(d)] ☐ Date of incident? [68.81(d)(1)] ☐ Date investigation began? [68.81(d)(2)] ☐ A description of the incident? [68.81(d)(3)] ☐ The factors that contributed to the incident? [68.81(d)(4)] ☐ Any recommendations resulting from the investigation? [68.81(d)(5)]	☐Y ☐N ☐N/A
51. Has the owner or operator established a system to address and resolve the report findings and recommendations, and are the resolutions and corrective actions documented? [68.81(e)]	☐Y ☐N ☐N/A
52. Was the report reviewed with all affected personnel whose job tasks are relevant to the incident findings including contract employees where applicable? [68.81(f)]	☐Y ☐N ☐N/A
53. Has the owner or operator retained incident investigation reports for at least five years? [68.81(g)]	☐Y ☐N ☐N/A

Section D - Employee Participation [68.83]

1. Has the owner or operator developed a written plan of action regarding the implementation of the employee participation required by this section? [68.83(a)]	☐Y ☐N ☐N/A
2. Has the owner or operator consulted with employees and their representatives on the conduct and development of process hazards analyses and on the development of the other elements of process safety management in chemical accident prevention provisions? [68.83(b)]	☐Y ☐N ☐N/A
3. Has the owner or operator provided to employees and their representatives access to process hazards analyses and to all other information required to be developed under the chemical accident prevention rule? [68.83(c)]	☐Y ☐N ☐N/A

Section E - Hot Work Permit [68.85]

1. Has the owner or operator issued a hot work permit for each hot work operation conducted on or near a covered process? [68.85(a)]	☐Y ☐N ☐N/A
2. Does the permit document that the fire prevention and protection requirements in 29CFR 1910.252(a) have been implemented prior to beginning the hot work operations? [68.85(b)]	☐Y ☐N ☐N/A
3. Does the permit indicate the date(s) authorized for hot work and the object(s) upon which hot work is to be performed? [68.85(b]	☐Y ☐N ☐N/A
4. Are the permits being kept on file until completion of the hot work operations? [68.85(b)]	☐Y ☐N ☐N/A

Section F - Contractors [68.87]

1. Has the owner or operator obtained and evaluated information regarding the contract owner or operator's safety performance and programs when selecting a contractor? [68.87(b)(1)]	☐Y ☐N ☐N/A
2. Informed contract owner or operator of the known potential fire, explosion, or toxic release hazards related to the contractor's work and the process? [68.87(b)(2)]	☐Y ☐N ☐N/A
3. Explained to the contract owner or operator the applicable provisions of the emergency response or the emergency action program? [68.87(b)(3)]	☐Y ☐N ☐N/A
4. Developed and implemented safe work practices consistent with §68.69(d), to control the entrance, presence, and exit of the contract owner or operator and contract employees in the covered process areas? [68.87(b)(4)]	☐Y ☐N ☐N/A

5. Periodically evaluated the performance of the contract owner or operator in fulfilling their obligations (as described at 68.87(c)(1) – (c)(5))? [68.87(b)(5)]	☐Y ☐N ☐N/A

Section G - Emergency Response [68.90 - 68.95]

Developed and implemented an emergency response program as provided in 40 CFR 68.90-68.95? Comments:	☐S ☐M ☐U ☐N/A
1. Is the facility designated as a "first responder" in case of an accidental release of regulated substances"	☐Y ☐N ☐N/A
1.a. If the facility is not a first responder:	
1.a.(1) For stationary sources with any regulated substances held in a process above threshold quantities, is the source included in the community emergency response plan developed under 42 U.S.C. 11003? [68.90(b)(1)]	☐Y ☐N ☐N/A
1.a.(2) For stationary sources with only regulated flammable substances held in a process above threshold quantities, has the owner or operator coordinated response actions with the local fire department? [68.90(b)(2)]	☐Y ☐N ☐N/A
1.a.(3) Are appropriate mechanisms in place to notify emergency responders when there is need for a response? [68.90(b)(3)]	☐Y ☐N ☐N/A
2. An emergency response plan is maintained at the stationary source and contains the following? [68.95(a)(1)] ☐ Procedures for informing the public and local emergency response agencies about accidental releases? [68.95(a)(1)(i)] ☐ Documentation of proper first-aid and emergency medical treatment necessary to treat accidental human exposures? [68.95(a)(1)(ii)] ☐ Procedures and measures for emergency response after an accidental release of a regulated substance? [68.95(a)(1)(iii)]	☐Y ☐N ☐N/A
3. The emergency response plan contains procedures for the use of emergency response equipment and for its inspection, testing, and maintenance? [68.95(a)(2)]	☐Y ☐N ☐N/A
4. The emergency response plan requires, and there is documentation of, training for all employees in relevant procedures? [68.95(a)(3)]	☐Y ☐N ☐N/A
5. The owner or operator has developed and implemented procedures to review and update, as appropriate, the emergency response plan to reflect changes at the stationary source and ensure that employees are informed of changes? [68.95(a)(4)]	☐Y ☐N ☐N/A
6. Did the owner or operator use a written plan that complies with other Federal contingency plan regulations or is consistent with the approach in the National Response Team's Integrated Contingency Plan Guidance (''One Plan'')? If so, does the plan include the elements provided in paragraph (a) of 68.95, and also complies with paragraph (c) of 68.95? [68.95(b)]	☐Y ☐N ☐N/A
7. Has the emergency response plan been coordinated with the community emergency response plan developed under EPCRA? [68.95(c)]	☐Y ☐N ☐N/A

Section H – Risk Management Plan [40 CFR 68.190 – 68.195]

1. Does the single registration form include, for each covered process, the name and CAS number of each regulated substance held above the threshold quantity in the process, the maximum quantity of each regulated substance or mixture in the process (in pounds) to two significant digits, the five- or six-digit NAICS code that most closely corresponds to the process and the Program level of the process? [68.160(b)(7)]	☐Y ☐N ☐N/A
2. Did the facility assign the correct program level(s) to its covered process(es)? [68.160(b)(7)]	☐Y ☐N ☐N/A

3. Has the owner or operator reviewed and updated the RMP and submitted it to EPA [68.190(a)]? Reason for update: ☐ Five-year update. [68.190(b)(1)] ☐ Within three years of a newly regulated substance listing. [68.190(b)(2)] ☐ At the time a new regulated substance is first present in an already regulated process above threshold quantities. [68.190(b)(3)] ☐ At the time a regulated substance is first present in an new process above threshold quantities. [68.190(b)(4)] ☐ Within six months of a change requiring revised PHA or hazard review. [68.190(b)(5)] ☐ Within six months of a change requiring a revised OCA as provided in 68.36. [68.190(b)(6)] ☐ Within six months of a change that alters the Program level that applies to any covered process. [68.190(b)(7)]	☐Y ☐N ☐N/A
4. If the owner or operator experienced an accidental release that met the five-year accident history reporting criteria (as described at 68.42) subsequent to April 9, 2004, did the owner or operator submit the information required at 68.168, 68.170(j) and 68.175(l) within six months of the release or by the time the RMP was updated as required at 68.190, whichever was earlier. [68.195(a)]	☐Y ☐N ☐N/A
5. If the emergency contact information required at 68.160(b)(6) has changed since June 21, 2004, did the owner or operator submit corrected information within thirty days of the change? [68.195(b)]	☐Y ☐N ☐N/A