NORTH CAROLINA DIVISION OF AIR QUALITY
15A NCAC 2D .2100 - Risk Management Program

112(r) Inspection Checklist

Inspection:

Inspection (date/time): _____
Facility ID Number: _____
Facility Name: _____
Inspection Team Leader: _____
Team Member: _____
Team Member: _____
Facility Representative: _____
Facility Representative: _____
Facility Representative: _____

40 CFR 68, Subpart G, Risk Management Plan:

1.2 EPA Facility ID#: _____
1.7 Responsible Person: _____
1.8 Emergency Contact: _____
1.8.c. Phone Number: _____
1.8.e. E-mail Address: _____
RMP Anniversary Date: _____
Title: _____
Title: _____
Title: _____

Section 1.17 Process(es):

Process	Chemical	Quantity (lbs)	Program Level

CHECKLIST KEY:
Y = YES indicates that the facility had documentation for the corresponding item at the time of inspection
N = NO indicates that the facility did not have documentation for the corresponding item at the time of inspection
UN = UNAVAILABLE indicates that the documentation was not available for review at the time of the inspection
N/A = NOT APPLICABLE may be used to indicate that a certain item is not applicable to the process
N/E = NOT EVALUATED may be used to indicate that a certain item was not evaluated at the time of the inspection

Subpart A – General	
.2103(1): 40 CFR 68.12, General requirements	
§68.12(a): The owner/operator of stationary source subject to this part shall submit a single RMP	
§68.12(b): Program 1 process: In addition to (a) above: (1) Document no imparts to public receptors: §68.25; (2) No accidents in the last five years: §68.42; (3) Response coordinated with local responders; and (4) Certify RMP: "Based on the criteria in 40 CFR 68.10."	
§68.12(c): Program 2 process: In addition to (a) above: (1) Implement management system: §68.15; (2) Conduct Hazard Assessment: Subpart B; (3) Implement program 2 prevention: §68.48 - §68.60; (4) Coordinate response actions with LEPCs: §68.93; (5) Implement ER plan and conduct exercises as provided in § 68.90; and (6) Submit in RMP Program 2 elements: §68.170.	
§68.12(d): Program 3 process: In addition to (a) above: (1) Implement management system: §68.15; (2) Conduct Hazard Assessment: §68.20 - §68.42; (3) Implement program 3 prevention: §68.65 - §68.87; (4) Coordinate response actions with LEPCs: §68.93; (5) Implement ER plan and conduct exercises as provided in § 68.90; and (6) Submit in RMP Program 3 elements: §68.175.	
COMMENTS:	

.2103(2): 40 CFR 68.15, Management	
§68.15(a): Shall develop a management system to oversee the implementation of risk management program elements.	
§68.15(b): Shall assign a qualified person **or** position that has the overall responsibility for the development, implementation, and integration of the risk management program.	
§68.15(c): When more than one person is involved: • Names or positions documented • Lines of authority defined through an organizational chart **or** similar means.	
COMMENTS:	

.2103(3): Subpart B - Hazard Assessment	
§68.36(a): Shall review and update the offsite consequence analysis at least once every five years.	
COMMENTS:	

.2103(4): Subpart C - Program 2 Prevention Program

§68.48, Safety information

§68.48(a): Shall compile and maintain the following up-to-date safety information: (1) SDS required by 29 CFR 1910.1200(g); (2) Maximum intended inventory; (3) Safe upper and lower temperatures, pressures, flows, and compositions; (4) Equipment specifications; and (5) Codes and standards used to design, build, and operate the process.	
§68.48(b): Shall ensure and document that the process is designed in compliance with recognized and generally accepted good engineering practices (RAGEGEPs).	
§68.48(c): Shall update the safety information if a major change occurs that makes the information inaccurate	

COMMENTS:

§68.50, Hazard review

§68.50(a): Shall conduct a review of the hazards associated with the regulated substances, process, and procedures. The review shall identify the following: (1) The hazards associated with the process and regulated substance; (2) Opportunities for equipment malfunctions or human errors that could cause accidental release; (3) The Safeguards used or needed to control the hazards or prevent equipment malfunction or human error; and (4) Any steps used or needed to detect or monitor releases.	
§68.50(b): Shall determine whether the process is designed, fabricated, and operated in accordance with the applicable standards or rules.	
§68.50(c): Shall document the results of the review and ensure that problems identified are resolved in a timely manner	
§68.50(d): Shall be updated at least once every five years	

COMMENTS:

§68.52, Operating procedures

§68.52(a): Shall prepare written operating procedures that provide clear instructions or steps for safely conducting activities associated with each covered process consistent with the safety information for the process	
§68.52(b): The procedures shall address the following: (1) Initial startup; (2) Normal operations; (3) Temporary operations; (4) Emergency shutdown; (5) Normal shutdown; (6) Startup following a normal or emergency shutdown; (7) Consequence of deviation and steps to avoid deviations; and (8) Equipment inspections.	
§68.52(c): Shall ensure that the operating procedures are updated whenever a major change occurs	

COMMENTS:

§68.54, Training

§68.54(a): Shall ensure that each employee assigned to a covered process have been trained **or** tested competent in the operating procedures provided in §68.52.	
§68.54(b): Refresher training shall be provided at least every three years.	
§68.54(c): May use training conducted under Federal or state regulations or industry specific standards or codes or training conducted by covered process equipment vendors.	
§68.54(d): Shall ensure that operators are trained in any updated or new procedures prior to startup of a process after a major change	

COMMENTS:

§68.56, Maintenance

§68.56(a): Shall prepare and implement procedures to maintain the on-going mechanical integrity of the process equipment.	
§68.56(b): Shall train each employee involved in maintaining the on-going mechanical integrity of the process.	
§68.56(c): Shall ensure that each contract maintenance employee is trained to perform the maintenance procedures.	
§68.56(d): Inspection and testing procedures shall follow recognized and generally accepted good engineering practices (RAGAGEPs)	

COMMENTS:

§68.58, Compliance audits

§68.58(a): Shall certify that they have evaluated compliance with the provisions of this subpart at least every three years.	
§68.58(b): Shall be conducted by at least one person knowledgeable in the process	
§68.58(c): Shall develop a report of the audit findings	
§68.58(d): Shall promptly determine and document an appropriate response to each of the findings	
§68.58(e): Shall retain the two (2) most recent compliance audit reports	

COMMENTS:

§68.60, Incident investigation

§68.60(a): Shall investigate each incident which resulted or could reasonably have resulted in a catastrophic release.	
§68.60(b): Shall be initiated as promptly as possible, but not later than 48 hours following the incident.	
§68.60(c): An incident investigation team shall be established and consist of at least one person knowledgeable in the process involved and other persons with appropriate knowledge and experience to thoroughly investigate and analyze the incident.	
§68.60(d): A report shall be prepared at the conclusion of the investigation which includes at a minimum: (1) Date of incident; (2) Date investigation began; (3) A description of the incident; (4) The factors that contributed to the incident; and, (5) Any recommendations resulted from the investigation.	
§68.60(e): Shall promptly address and resolve the investigation findings and recommendations shall be documented.	
§68.60(f): Findings shall be reviewed with all affected personnel whose job tasks are affected by the findings	
§68.60(g): Incident investigation reports shall be retained for five years.	

COMMENTS:

.2103(5): Subpart D - Program 3 Prevention Program

§68.65, Process safety information (PSI)

§68.65(a): Shall complete a compilation of written PSI before conducting any process hazard analysis required by the rule.	
§68.65(b): Does information pertaining to the hazards of the regulated substances in the process consist of at least the following: (1) Toxicity information; (2) Permissible exposure limits; (3) Physical data; (4) Reactivity data; (5) Corrosivity data; (6) Thermal and chemical stability data; and (7) Hazardous effects of inadvertent mixing.	
§68.65(c): Does the PSI contain the following information pertaining to the technology of the process: (i) A block flow diagram; (ii) Process chemistry; (iii) Maximum intended inventory; (iv) Safe upper and lower limits such as temp, pressure, flows or compositions; and, (v) An evaluation of the consequences of deviations.	
§68.65(d)(1): Does the PSI contain the following information pertaining to the equipment in the process: (i) Materials of construction; (ii) Piping and instrument diagrams (P&ID's); (iii) Electrical classification; (iv) Relief system design and design basis; (v) Ventilation system design; (vi) Design codes and standards employed; (vii) Material and energy balances; and (viii) Safety systems (e.g. interlocks, detection, suppression).	
§68.65(d)(2): Shall ensure and document that the process is designed and maintained in compliance with recognized and generally accepted good engineering practices. (RAGAGEP).	
§68.65(d)(3): For existing equipment that are designed and constructed in accordance with codes, standards, or practices that are no longer in general use, the owner/operator shall determine and document that the equipment is designed, maintained, inspected, tested and operating in a safe manner.	

COMMENTS:

§68.67, Process hazard analysis (PHA)

§68.67(a): Shall identify, evaluate, and control the hazards involved in the process. PHA's shall be updated and revalidated, based on their completion date.	
§68.67(b): Shall use an appropriate methodology to determine and evaluate the hazards of the process being analyzed.	
§68.67(c): The PHA shall address: (1) The hazards of the process; (2) Findings from previous incidents; (3) Applicable engineering and administrative controls; (4) Consequences of failure; (5) Stationary source siting; (6) Human factors; and (7) Range of possible safety and health effects.	
§68.67(d): Shall be performed by a team with expertise in engineering, process operations, and PHA methodology.	
§68.67(e): The owner/operator shall: • Establish a system to address the team's findings; • Assure that the recommendations are resolved in a timely manner; • Resolutions are documented; • Have a written schedule when actions are to be completed; and • Communicate actions to affected employees of the change.	
§68.67(f): Shall be updated and revalidated at least every five years after the initial PHA.	
§68.67(g): Shall document resolutions described in paragraph (e) of this section for the life of the process.	

COMMENTS:

§68.69, Operating procedures

§68.69(a): Shall develop and implement written operating procedures that provide clear instructions for safely conducting activities involved in each covered process consistent with the PSI and shall address at least the following elements:	
§68.69(a)(1): Steps for each operating phase: (i) Initial startup; (ii) Normal operation; (iii) Temporary operations; (iv) Emergency shutdown; (v) Emergency operation; (vi) Normal shutdown; and (vii) Startup following a turnaround, or after an emergency shutdown.	
§68.69(a)(2): Operating limits: (i) Consequences of deviation; and (ii) Steps required to correct or avoid deviation.	
§68.69(a)(3): Safety and health considerations: (i) Properties of the hazards presented by the chemicals used in the process; (ii) Precautions necessary to prevent exposure; (iii) Control measures to be taken if physical contact or airborne exposure occur; (iv) Quality control for raw materials and control of hazardous chemical inventory levels; and (v) Any special or unique hazards.	
§68.69(a)(4): Safety systems and their functions.	
§68.69(b): Shall be readily accessible to employees who work in or maintain a process.	
§68.69(c): Shall certified annually that operating procedures are current and accurate.	
§68.69(d): Shall develop and implement Safe work practices to provide for the control of hazards during specific operations (i.e., lockout/tagout, confined space entry, entrance/access procedures, opening process equipment/piping) for employees and contractor employees.	

COMMENTS:

§68.71, Training

§68.71(a): Employees involved in operating a process, and before being involved in operating a newly assigned process, are provided with initial training in an overview of the process and the operation procedures.	
§68.71(b): Refresher training provided at least once every 3 years or more often if necessary to each employee involved in operating a process.	
§68.71(c): Shall prepare a record which contains the identity of the employee, the date of training, and the means used to verify that the employee understood the training.	

COMMENTS:

§68.73, Mechanical integrity

§68.73(a): Shall apply to the following process equipment: (1) Pressure vessels and storage tanks; (2) Piping systems (including piping components such as valves); (3) Relief and vent systems and devices; (4) Emergency shutdown systems; (5) Controls (including monitoring devices and sensors, alarms, and interlocks); and (6) Pumps.	
§68.73(b): Shall establish and implement written procedures to maintain the ongoing integrity of process equipment.	
§68.73(c): Shall train each employee involved in maintaining the on-going integrity of process equipment.	
§68.73(d): Inspection and testing: (1) Shall be performed on process equipment; (2) Shall follow (RAGAGEPs); (3) Shall be consistent with applicable manufacturers' recommendations; and (4) Shall be documented.	

§68.73(e): Shall correct deficiencies in equipment that are outside acceptable limits (defined by PSI) before further use or in a safe and timely manner when necessary means are taken to assure safe operation.	
§68.73(f): Quality Assurance: (1) Shall assure that equipment as it is fabricated is suitable for the process application for which they will be used; (2) Appropriate checks and inspections shall be performed to assure that equipment is installed properly and consistent with design specifications and the manufacturer's instructions; and (3) Shall assure that maintenance materials, spare parts and equipment are suitable for the process application for which they will be used.	
COMMENTS:	

§68.75, Management of change

§68.75(a): Shall establish and implement written procedures to manage changes to process chemicals, technology, equipment, procedures, and changes to stationary sources that affect a covered process.	
§68.75(b): Shall assure that the following considerations are addressed prior to any change: (1) The technical basis for the proposed change; (2) Impact of change on safety and health; (3) Modifications to operating procedures; (4) necessary time period for the change; and (5) Authorization requirements for the proposed change.	
§68.75(c): Operation, maintenance and/or contract employees, whose job tasks would be affected by a change in the process, are informed of, and trained in, the change prior to start-up of the process or affected part of the process.	
§68.75(d): If any change resulted in a change in PSI, such information shall be updated accordingly.	
§68.75(e): If any change resulted in a change in operating procedures or practices, such procedures or practices shall be updated accordingly.	
COMMENTS:	

§68.77, Pre-startup review

§68.77(a): Shall perform a pre-startup safety review for new stationary sources and for modified stationary sources when the modification is significant enough to require a change in the PSI.	
§68.77(b)(1): Construction and equipment is in accordance with design specifications.	
§68.77(b)(2): Safety, operating, maintenance, and emergency procedures are in place and are adequate.	
§68.77(b)(3): For new stationary sources, PHA has been performed, and recommendations have been resolved/ implemented **or** for modified stationary sources, meet requirements contained in MOCs.	
§68.77(b)(4): Training of each employee involved in operating a process had been completed.	
COMMENTS:	

§68.79, Compliance audits

§68.79(a): Shall certify that they have evaluated compliance with the provisions of this subpart at least every three years to verify that procedures and practices developed under this subpart are adequate and being followed.	
§68.79(b): Shall be conducted by at least one person knowledgeable in the process.	
§68.79(c): A report of audit findings of the audit shall be developed.	
§68.79(d): Shall promptly determine and document an appropriate response to each of the findings of the compliance audit.	
§68.79(e): Shall retain the two (2) most recent compliance audit reports.	
COMMENTS:	

§68.81, Incident investigation

§68.81(a): Shall investigate each incident which resulted or could reasonably have resulted in a catastrophic release.	
§68.81(b): Shall be initiated as promptly as possible, but not later than 48 hours following the incident.	
§68.81(c): An incident investigation team shall be established and consist of at least one person knowledgeable in the process involved.	
§68.81(d): A report shall be prepared at the conclusion of the investigation which includes at a minimum: (1) Date of incident; (2) Date investigation began; (3) A description of the incident; (4) The factors that contributed to the incident; and, (5) Any recommendations resulting from the investigation.	
§68.81(e): Shall establish a system to promptly address and resolve the incident report findings and recommendations.	
§68.81(f): The report shall be reviewed with all affected personnel whose job tasks are relevant to the incident findings including contract employees where applicable	
§68.81(g): Investigation reports shall be retained for five years.	
COMMENTS:	

§68.83, Employee participation

§68.83(a): Shall develop a written plan of action regarding the implementation of the employee participation requirements.	
§68.83(b): Shall consult with employees and their representatives on the conduct and development of PHAs and on the development of the other elements of PSM.	
§68.83(c): Shall provide to employees and their representatives access to PHAs and to all other information required to be developed under RMP.	
COMMENTS:	

§68.85, Hot work permit

§68.85(a): Shall issue a hot work permit for hot work operations conducted on or near a covered process	
§68.85(b): Hot work permits document the dates authorized and should include fire protection and prevention requirements in 29 CFR 1910.252(a) have been implemented prior to beginning hot work operations (1)(i) remove fire hazards in area (1)(ii) guarding of flammable materials (2)(ii) Fire extinguishers readily available (2)(iii) Fire watch	
§68.85(c): Hot work permits are kept on file until completion of hot work operations.	
COMMENTS:	

§68.87, Contractors

§68.87(b)(1): When selecting a contractor, shall obtain and evaluate information regarding the contract owner or operator's safety performance and program	
§68.87(b)(2): Shall inform 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)(3): Shall explain to the contract owner or operator the applicable provisions of the facility emergency response plan	
§68.87(b)(4): Shall develop and implement 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 covered process areas	
§68.87(b)(5): Shall periodically evaluate the performance of the contract owner or operator in fulfilling their obligations as specified in §68.87(c) of this section	
COMMENTS:	

.2103(6): Subpart E – Emergency Response

Non-Responding Stationary Sources

§68.90(b): The owner or operator of a stationary source whose employees will not respond to accidental release of regulated substance need not comply with §68.95 of this part provided that:
(1) For stationary sources with toxic regulated substances shall be included in the community emergency response plan;
(2) For stationary sources with flammable regulated substances shall be coordinated with local fire departments;
(3) Appropriate mechanisms are in place to notify emergency responders
(4) Shall perform the annual emergency response coordination activities required under§ 68.93; and
(5) Shall perform the annual notification exercise required under §68.96(a) (**by 12/19/2024**).
(6) Procedures for informing the public.

§68.93, Emergency Response Coordination

§68.93(a): Coordination shall occur at least annually to address changes: at the stationary source; in the stationary source's emergency response and/or emergency action plan' and/or in the community emergency response plan.

§68.93(b): Coordination shall include providing the LEPC with:
- Providing the LEPC with the emergency response plan if one exists, emergency action plan, updated emergency contact information; and any other information that the LEPC identifies as relevant to ER planning.
- For responding stationary sources, coordination shall also include consulting with LEPCs to establish appropriate schedules and plans for field and tabletop exercises required under §68.96(b).
- Shall request an opportunity to meet with the LEPC to review and discuss these materials.

§68.93(c): Shall document coordination with local authorities, including: the names of individuals involved and their contact information; dates of coordination activities, and nature of coordination activities.

§68.96, Emergency Response Exercises

§68.96(a): Notification drill - At least once every calendar year, conduct an exercise of the stationary source's emergency response notification mechanisms required under 68.90(b)(3) or 68.95(a)(1)(i). Shall maintain a written record of each notification exercise conducted over the last five years. (**by 12/19/2024**)

COMMENTS:

Responding Stationary Sources

§68.90(a): Shall comply with the requirements of §§ 68.93, 68.95, and 68.96.

§68.93, Emergency Response Coordination (Effective September 21, 2018)

§68.93(a): Coordination shall occur at least annually to address changes: at the stationary source; in the stationary source's emergency response and/or emergency action plan' and/or in the community emergency response plan.

§68.93(b): Coordination shall include providing the LEPC with:
- Providing the LEPC with the emergency response plan if one exists, emergency action plan, updated emergency contact information; and any other information that the LEPC identifies as relevant to ER planning.
- For responding stationary sources, coordination shall also include consulting with LEPCs to establish appropriate schedules and plans for field and tabletop exercises required under §68.96(b).
- Shall request an opportunity to meet with the LEPC to review and discuss these materials.

§68.93(c): Shall document coordination with local authorities, including: the names of individuals involved and their contact information; dates of coordination activities, and nature of coordination activities.

§68.95, Emergency Response Program

§68.95(a): Shall develop and implement an emergency response program for the purposes of protecting public health and the environment.

§68.95(a)(1): An emergency response plan shall have the following:
(i): Procedures for informing the public and appropriate Federal, state, and LEPC about accidental releases;
(ii) Documentation of proper first aid; and
(iii) Procedures for emergency response after an accidental release of a regulated substance.

§68.95(a)(2): Procedures for use of emergency response equipment and for its inspection, testing, and maintenance.

§68.95(a)(3): Training for all employees in relevant procedures.

§68.95(a)(4): 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(c): The emergency response plan is coordinated with the LEPC's community emergency response plan

§68.96, Emergency Response Exercises

§68.96(a): Notification exercises - At least once every calendar year, conduct an exercise of the stationary source's emergency response notification mechanisms required under 68.90(b)(3) or 68.95(a)(1)(i). Shall maintain a written record of each notification exercise conducted over the last five years. (**by 12/19/2024**)

§68.10(d): Shall have developed plans for conducting emergency response exercises in accordance with provisions of §68.96 (**by 12/19/2023**).

§68.96(b): Emergency response exercise program - For sources subject to 68.95, shall develop exercise plans and schedules to include as appropriate emergency response contractors and the LEPC.

§68.96(b)(1): Field exercises - Shall conduct field exercises involving the simulated accidental release of a regulated substance:
(i) Frequency – No due date, shall consult with LEPC to establish an appropriate frequency.
(ii) Scope. test procedures to notify the public and appropriate federal, state, and local agencies, and measures for emergency response actions including evacuations and medical treatment; tests of communication systems, mobilization of facility ER personnel, including contractors, as appropriate, LEPC equipment deployment, and any other action identified in the ER program as appropriate.
(NO due date, pending on agreed upon frequency)

§68.96(b)(2): Tabletop exercises - Shall conduct a tabletop exercise involving the simulated accidental release of a regulated substance.
(i) Frequency - By December 21, 2026, and at a minimum of at least once every three years.
(ii) Scope – shall involve discussions of the source's emergency response plan. The exercise should include discussion of:
- Procedures to notify the public and the appropriate Federal, state, and local emergency response agencies;
- Procedures and measures for emergency response including evacuations and medical treatment:
- Identification of a facility emergency response personnel and/or contractors and their responsibilities;
- Coordination with local emergency responders;
- Procedures for emergency response equipment deployment; and
- Any other action identified in the emergency response plan as appropriate. (by 12/21/20204)

§68.96(c): Alternative means -
(1) Exercises conducted to meet other Federal, state or local exercise requirements
(2) Response to an accidental release provided the response includes the actions indicated in paragraphs (a) and/or (b) of this section.

COMMENTS:

Notes:

Notes: