Firm Name, City & State: **FEI Number:**

Inspection Date(s): **FCE Number:**

Investigators:

DEPARTMENT OF HEALTH AND HUMAN SERVICES

FOOD AND DRUG ADMINISTRATION

ASEPTIC PROCESSING AND PACKAGING REPORT

This inspection report is available in PDF on the forms site: *http://www.fda.gov/opacom/morechoices/fdaforms/ora.html.* Narrative responses to each item can be entered in the item's "comments" area or where otherwise prompted. Complete documentation of deficiencies, including deviations from Part 113, should be narrated with reference to photos, exhibits, etc., in the EIR under "Objectionable Conditions and Management's Response." Under "Container Sterilizing, Filling AND Closing Operations" (pp. 11-16), answer only questions pertaining to operations observed during the inspection. When necessary, refer the reader to the appropriate section of the EIR for a full explanation of details.

This form should be downloaded from the forms site prior to completion and copying. Submit the finished report as an attachment to the EIR.

ESTABLISHMENT REGISTRATION – 108.35(c)(1)

1. HAS THE FIRM REGISTERED ITS PROCESSING ESTABLISHMENT WITH FDA? ..... Yes ☐ No ☐

   IF FIRM HAS REGISTERED, THE FCE NO. IS _____ .

   COMMENTS:

PROCESS ESTABLISHMENT AND FILING – 108.35(c)(2), 113.83

2. HAVE SCHEDULED PROCESSES BEEN FILED WITH FDA LISTING ALL CRITICAL FACTORS NECESSARY TO ACHIEVE COMMERCIAL STERILITY FOR THE PRODUCT, THE PRODUCT STERILIZATION SYSTEM, THE PACKAGING STERILIZATION SYSTEM AND THE PACKAGING MATERIAL? ..... Yes ☐ No ☐

   COMMENTS:

3. HAVE SCHEDULED PROCESSES USED BY THE FIRM BEEN RECOMMENDED BY A PROCESS AUTHORITY (LETTER, BULLETIN, SOP MANUAL, ETC.)? ..... Yes ☐ No ☐

   COMMENTS:

4. DOES THE FIRM HAVE A PROCESS LETTER OR OTHER DOCUMENTATION LISTING CRITICAL FACTORS NECESSARY TO CONTROL IN THE ATTAINMENT OF COMMERCIAL STERILITY? ..... Yes ☐ No ☐

   COMMENTS:

5. ARE FILED PROCESSES AT LEAST EQUAL TO RECOMMENDED PROCESSES PROVIDED BY THE PROCESS AUTHORITY? ..... Yes ☐ No ☐

   COMMENTS:

6. DOES THE FIRM HAVE ON FILE SUPPLEMENTAL INFORMATION LISTING PROCEDURES FOR PRE-STERILIZATION AND STERILITY MAINTENANCE OF PROCESSING AND PACKAGING EQUIPMENT AND STERILIZATION OF PACKAGING MATERIAL? ..... Yes ☐ No ☐

   COMMENTS:

7. HAVE FILED, SCHEDULED PROCESSES BEEN CHANGED IN SUCH A WAY THAT COULD AFFECT THE ATTAINMENT OF COMMERCIAL STERILITY? ..... Yes ☐ No ☐

   COMMENTS:

8. IF PROCESS CHANGES HAVE BEEN MADE THAT COULD AFFECT THE ATTAINMENT OF COMMERCIAL STERILITY, HAVE THE CHANGES BEEN REVIEWED AND SUBSTANTIATED BY A QUALIFIED SCIENTIFIC AUTHORITY AND FILED WITH FDA? ..... Yes ☐ No ☐

   COMMENTS:

9. LIST THE FIRM'S PROCESS AUTHORITIES:

10. ARE PROCESS AUTHORITIES THE SAME AS THOSE FILED WITH FDA? ..... Yes ☐ No ☐

    COMMENTS:

11. LIST ALL PRODUCTS COVERED DURING THIS INSPECTION:

PRODUCT	**STYLE OF PACK**	**CONTAINER TYPE/SIZE**

    COMMENTS:

12. LIST ALL FACTORS CRITICAL TO THE ATTAINMENT AND MAINTENANCE OF COMMERCIAL STERILITY PER PROCESS AUTHORITY LETTER AND FDA FILING FORMS FOR PRODUCTS COVERED DURING THIS INSPECTION (INCLUDE PRE-STERILIZATION AND MAINTENANCE OF STERILITY IN THE ASEPTIC PROCESSING AND PACKAGING SYSTEMS AND SURGE TANKS AS WELL AS THE PROCESSING, PACKAGING AND HOLDING OF PRODUCTS IN THESE SYSTEMS):

RAW MATERIALS

13. DOES THE FIRM TAKE ADEQUATE MEASURES TO PREVENT THE BUILD-UP OF MICROORGANISMS IN UNPROCESSED PRODUCT BEFORE THERMAL PROCESSING? ..... Yes ☐ No ☐

    COMMENTS:

14. WHAT IS THE SOURCE OF WATER USED FOR PROCESSING AND CLEAN-UP IN THE PLANT?

15. IS PLANT WATER ADEQUATELY TREATED WITH CHLORINE OR OTHER APPROVED CHEMICALS TO RENDER IT POTABLE? ..... Yes ☐ No ☐

    COMMENTS:

16. ARE ALL FOOD AND COLOR ADDITIVES FDA APPROVED? ..... Yes ☐ No ☐
COMMENTS:

PRODUCT PREPARATION – 113.81

17. ARE PRODUCTS PREPARED ACCORDING TO THE METHOD AND/OR FORMULATION SPECIFIED IN THE RECOMMENDED SCHEDULED PROCESS? ..... Yes ☐ No ☐
COMMENTS:

18. ARE INGREDIENTS WEIGHED PROPERLY USING ACCURATE SCALES? ..... Yes ☐ No ☐
COMMENTS:

PRODUCT STERILIZATION EQUIPMENT AND CONTROLS

TEMPERATURE INDICATING DEVICE – 113.40(g)(1)(i)(a)

19. IS THE PRODUCT STERILIZER EQUIPPED WITH AT LEAST 1 MERCURY-IN-GLASS THERMOMETER OR EQUIVALENT TEMPERATURE INDICATING DEVICE (TID) THAT COMPLIES WITH PART 113.40(g)(1)(i)(a)? ..... Yes ☐ No ☐
COMMENTS:

20. IS THE TID CHECKED FOR ACCURACY AT LEAST ONCE PER YEAR AND DOCUMENTED PER PART 113.40(g)(1)(i)(a)? ..... Yes ☐ No ☐
COMMENTS:

TEMPERATURE RECORDING DEVICE – 113.40(g)(1)(i)(b)

21. IS THE TEMPERATURE RECORDING DEVICE EQUIPPED WITH A TEMPERATURE SENSOR INSTALLED IN THE PRODUCT FLOW AT THE HOLDING TUBE OUTLET BETWEEN THE HOLDING TUBE AND THE INLET TO THE COOLER? ..... Yes ☐ No ☐
COMMENTS:

22. IS THE TEMPERATURE RECORDING DEVICE ADJUSTED TO AGREE AS NEARLY AS POSSIBLE WITH BUT NEVER HIGHER THAN A KNOWN ACCURATE MERCURY-IN-GLASS THERMOMETER? ..... Yes ☐ No ☐
COMMENTS:

23. DOES THE TEMPERATURE RECORDING DEVICE COMPLY WITH ALL REQUIREMENTS OF 113.40(g)(1)(i)(b)? ..... Yes ☐ No ☐
COMMENTS:

TEMPERATURE RECORDER-CONTROLLER (TRC) – 113.40(g)(1)(i)(c)

24. IS THE TRC INSTALLED IN THE PRODUCT FLOW AT THE FINAL HEATER OUTLET? ..... Yes ☐ No ☐
COMMENTS:

25. DOES THE TRC MEET THE REQUIREMENTS OF 113.40(g)(1)(i)(c)? ..... Yes ☐ No ☐
COMMENTS:

26. DESCRIBE HOW THE TEMPERATURE RECORDER DEVICE IS CHECKED FOR ACCURACY:

METERING (TIMING) PUMP – 113.40(g)(1)(i)(f)

27. DESCRIBE THE TYPE OF METERING PUMP:

28. IS THE PUMP LOCATED UPSTREAM FROM THE HOLD TUBE? ..... Yes ☐ No ☐
COMMENTS:

29. THE PUMP IS ..... Fixed Rate ☐ Variable Speed ☐
COMMENTS:

30. IS THERE A MEANS OF PREVENTING UNAUTHORIZED SPEED CHANGES? ..... Yes ☐ No ☐
IF YES, WHAT ARE THE MEANS FOR PREVENTING UNAUTHORIZED SPEED CHANGES?

OTHER COMMENTS:

31. IF THE PUMP IS OTHER THAN A POSITIVE DISPLACEMENT TYPE, WHAT EVIDENCE DOES THE FIRM HAVE THAT IT IS CAPABLE OF MAINTAINING THE REQUIRED RATE OF PRODUCT FLOW?
DOES THE FIRM USE A FLOW METER TO RECORD OR REGULATE PRODUCT FLOW? ..... Yes ☐ No ☐
COMMENTS:

32. IF A FLOW METER IS USED, LIST THE FLOW METER MAKE AND MODEL NO. AND EXPLAIN HOW IT IS USED:

33. WHAT PROCEDURES ARE USED TO VALIDATE THE FLOW RATE? (PUMP STROKES, CONTAINERS OR GAL/TIME PERIOD, TACHOMETER, ETC.):

34. HAS THE PROCESSOR DOCUMENTED THAT THE FLOW RATE AND FLOW CHARACTERISTICS OF THE PRODUCT ARE THE SAME AS THOSE ESTABLISHED BY THE PROCESS AUTHORITY? ..... Yes ☐ No ☐
COMMENTS:

35. IS THE PRODUCT FLOW RATE MONITORED AND DOCUMENTED BY THE PROCESSOR AS A ROUTINE PART OF THE SYSTEM OPERATION? ..... Yes ☐ No ☐

COMMENTS:

36. HOW IS THE FLOW METER SYSTEM MAINTAINED?

PRODUCT HEATER

37. IS THE PRODUCT HEATING SYSTEM:

Steam Injection ☐ Steam Infusion ☐ Plate Heat ☐

Tubular ☐ or Scrapped Surface ☐ Heat Exchanger ☐ OHMIC ☐

Other ☐ Explain:

COMMENTS:

PRODUCT-TO-PRODUCT REGENERATOR – 113.40(g)(1)(i)(d)

38. IF A PRODUCT-TO-PRODUCT REGENERATOR IS USED, IS IT EQUIPPED WITH A DIFFERENTIAL PRESSURE RECORDER-CONTROLLER TO ASSURE THAT THE PRESSURE OF THE STERILIZED PRODUCT IN THE REGENERATOR IS GREATER THAN THE PRESSURE OF ANY UNSTERILIZED PRODUCT IN THE REGENERATOR? ..... Yes ☐ No ☐ Regenerator Not Used ☐

COMMENTS:

IF YES, DOES THE DIFFERENTIAL PRESSURE RECORDER-CONTROLLER COMPLY WITH PART 113.40(g)(1)(i)(e)? ..... Yes ☐ No ☐

COMMENTS:

39. HAS THE DIFFERENTIAL PRESSURE RECORDER-CONTROLLER BEEN TESTED FOR ACCURACY? – 113.40(g)(1)(i)(e) ..... Yes ☐ No ☐ N/A ☐

COMMENTS:

IF SO, LIST THE TEST DATE: _____

STERILIZER (PRODUCT HOLDING TUBE) – 113.40(g)(1)(i)(g)

40. IS THE HOLD TUBE SLOPED UPWARD AT LEAST 0.25 IN./FT? ..... Yes ☐ No ☐

COMMENTS:

41. IF DISASSEMBLED FOR CLEANING, HOW DOES THE FIRM ASSURE AFTER REASSEMBLY THAT IT CONFORMS TO THE SCHEDULED PROCESS PARAMETERS?

42. DO THE HOLD TUBE DIAMETER AND LENGTH CONFORM TO THOSE LISTED IN THE FILED SCHEDULED PROCESS? ..... Yes ☐ No ☐

COMMENTS:

43. IS IT DESIGNED SO THAT NO PORTION OF TUBE CAN BE HEATED BETWEEN PRODUCT INLET AND OUTLET? ..... Yes ☐ No ☐

COMMENTS:

EQUIPMENT DOWNSTREAM FROM THE HOLDING TUBE

FLOW DIVERSION SYSTEM – 13.40(g)(1)(i)(h)

44. IS THE ASEPTIC PROCESSING SYSTEM EQUIPPED WITH A FLOW DIVERSION VALVE? ..... Yes ☐ No ☐

COMMENTS:

45. IF PRESENT, IS IT INSTALLED IN THE PRODUCT PIPING LOCATED BETWEEN THE PRODUCT COOLER AND THE PRODUCT FILLER OR ASEPTIC SURGE TANK? ..... Yes ☐ No ☐

COMMENTS:

46. IS IT DESIGNED TO AUTOMATICALLY DIVERT FLOW AWAY FROM THE FILLER OR ASEPTIC SURGE TANK? ..... Yes ☐ No ☐

COMMENTS:

47. IS IT DESIGNED/INSTALLED WITH NECESSARY SENSORS AND ACTUATORS TO OPERATE WHENEVER THE STERILIZING TEMPERATURE IN THE HOLD TUBE OR DIFFERENTIAL PRESSURE IN THE PRODUCT REGENERATOR DROPS BELOW SPECIFIED LIMITS? ..... Yes ☐ No ☐

COMMENTS:

48. IS IT DESIGNED/OPERATED IN ACCORDANCE WITH RECOMMENDATIONS OF AN ASEPTIC PROCESSING AND PACKAGING AUTHORITY? ..... Yes ☐ No ☐

COMMENTS:

49. DESCRIBE THE FIRM'S METHOD FOR DIVERTING NON-STERILE PRODUCT AWAY FROM THE FILLER OR ASEPTIC SURGE TANK, INCLUDING ANY DOCUMENTATION FROM A PROCESSING AUTHORITY THAT MAY LIST SPECIFIC RECOMMENDATIONS FOR THE DESIGN AND OPERATION OF THE SYSTEM:

50. DESCRIBE HOW FLOW DIVERSION INCIDENTS, INCLUDING CORRECTIVE ACTION AND DISPOSITION OF DIVERTED PRODUCT, ARE DOCUMENTED:

STEAM SEALS – 113.40(g)(1)(i)(i)

51. ARE ROTATING OR RECIPROCATING SHAFTS AND VALVE STEMS EQUIPPED WITH STEAM SEALS OR OTHER EFFECTIVE BARRIERS AT POTENTIAL ACCESS POINTS? ..... Yes ☐ No ☐

COMMENTS:

52. DOES THE FIRM MAINTAIN A RECORD SHOWING OBSERVATION OF THE STEAM SEALS FOR PROPER OPERATION? ..... Yes ☐ No ☐

COMMENTS:

ASEPTIC SURGE TANKS – 108.35(c)(2); 113.40(g)(1)(ii)

53. DOES THE FIRM HAVE DOCUMENTATION FROM ITS PROCESS AUTHORITY SPECIFYING THE STERILIZATION PROCEDURE?..... Yes ☐ No ☐

COMMENTS:

54. ARE THEY ADEQUATELY VENTED OR PURGED OF AIR PRIOR TO STERILIZATION? ..... Yes ☐ No ☐

COMMENTS:

55. ARE THEY STERILIZED WITH Steam ☐ or Hot Water ☐ ?

COMMENTS:

56. HAVE VENT/PURGE AND STERILIZATION PROCEDURES AND SCHEDULES BEEN ESTABLISHED BY A PROCESS AUTHORITY?..... Yes ☐ No ☐

COMMENTS:

57. IS STERILE AIR OVER-PRESSURE MAINTAINED ON ASEPTIC SURGE TANKS? ..... Yes ☐ No ☐

COMMENTS:

58. IS STERILE AIR PRODUCED BY Incineration ☐ Filtration ☐ Other ☐ ?

Explain Other:

COMMENTS:

59. HOW DOES THE FIRM MONITOR STERILE AIR OR GAS OVER-PRESSURE AND ACHIEVEMENT OF COMMERCIAL STERILITY?

60. WHAT TYPE OF FILTER SYSTEM IS USED TO STERILIZE THE AIR?

Heppa (Box) ☐ Cartridge ☐ Sterilizing (Capable of being sterilized) ☐ Non-Sterilizing ☐

*(For example, the box fi lter is generally sterilized with a chemical or dry heat — steam or hot water potentially will affect its integrity and **should** be avoided; cartridge fi lters are designed to be used either for liquids or air and can be sterilized many different ways, but moist heat and steam are preferred.)*

COMMENTS:

61. IF A STERILE FILTER IS USED, WHAT ARE THE FILTER SPECIFICATIONS?

62. DOES THE FIRM HAVE EVIDENCE THAT WATER WILL OR WILL NOT AFFECT THE AIR FILTRATION PERFORMANCE OF THE FILTER? ..... Yes ☐ No ☐

COMMENTS:

63. HOW OFTEN ARE FILTERS CHANGED?

IS THIS FREQUENCY CONSISTENT WITH THE MANUFACTURER OR PROCESS AUTHORITY RECOMMENDATIONS? ..... Yes ☐ No ☐

COMMENTS:

64. ARE ASEPTIC FILTER CHANGES DOCUMENTED ON PROCESSING RECORDS? ..... Yes ☐ No ☐

COMMENTS:

65. HAS THE PROCESS AUTHORITY, THE FILTER MANUFACTURER OR THE FIRM TAKEN INTO ACCOUNT THE EFFECT OF INCINERATED AIR OR STEAM ON THE INTEGRITY OF FILTERS?..... Yes ☐ No ☐

COMMENTS:

66. DOES THE FIRM HAVE A PROCEDURE FOR DETERMINING THE INTEGRITY OF FILTERS?..... Yes ☐ No ☐

IF YES, WHAT IS THE PROCEDURE AND IS IT CONSISTENT WITH THE PROCEDURES RECOMMENDED BY THE FILTER SUPPLIER AND/OR PROCESS AUTHORITY?

OTHER COMMENTS:

67. WHAT IS THE FIRM'S PROCEDURE FOR ENSURING THE STERILITY OF OVER-PRESSURE GASES AND ANY FILTERS USED TO FILTER THE STERILE GASES?

68. DO RECORDS INDICATE LOSS OF STERILITY IN THE SURGE TANK? – 113.40(g)(1)(ii)(d)..... Yes ☐ No ☐

IF YES, WAS THE INCIDENT RECORDED AND HANDLED AS A PROCESS DEVIATION? – 113.40(g)(1)(ii)(d) ..... Yes ☐ No ☐

COMMENTS:

PROCESS CONTROL SYSTEMS

69. ARE PRODUCT HEATING AND STERILIZATION SYSTEMS CONTROLLED Manually ☐ or by Computer ☐ ?

COMMENTS:

70. WERE COMPUTERIZED CONTROL SYSTEMS VALIDATED UPON INSTALLATION TO ENSURE THAT THEY OPERATE AS DESIGNED? ..... Yes ☐ No ☐

COMMENTS:

71. ARE AUTOMATED SYSTEMS ROUTINELY CHALLENGED/CALIBRATED TO VERIFY THAT PRODUCTS RECEIVE THE SCHEDULED PROCESS? ..... Yes ☐ No ☐

IF YES, WHEN WAS THE LAST CALIBRATION PERFORMED? _____

COMMENTS:

72. OBTAIN AS AN EXHIBIT A COPY OF THE MOST RECENT CHALLENGE/CALIBRATION RECORD FOR THE AUTOMATIC CONTROLS *(INCLUDED **SHOULD** BE THE METHODOLOGY EMPLOYED, THE TESTING FREQUENCY, INDIVIDUALS WHO CONDUCTED THE TEST AND THE TEST RESULTS).*

COMMENTS:

73. DOES THE FIRM HAVE DOCUMENTATION SHOWING THE VALIDATION OF STERILIZATION PROCEDURES? ..... Yes ☐ No ☐

COMMENTS:

ASEPTIC PROCESSING RECORDS – 113.40(g)(1)(ii)(e)

74. ARE RECORDS MAINTAINED AT THE FOLLOWING POINTS AT START-UP AND WITH SUFFICIENT FREQUENCY TO ENSURE THAT THE PROCESS MEETS THE PARAMETERS OF THE SCHEDULED PROCESS?

TEMPERATURE INDICATING DEVICE IN THE HOLDING TUBE OUTLET ..... Yes ☐ No ☐

COMMENTS:

TEMPERATURE RECORDER IN THE HOLDING TUBE OUTLET ..... Yes ☐ No ☐

COMMENTS:

TEMPERATURE RECORDER-CONTROLLER IN THE FINAL PRODUCT HEATER OUTLET ..... Yes ☐ No ☐

COMMENTS:

DIFFERENTIAL PRESSURE RECORDER IF A PRODUCT REGENERATOR IS USED ..... Yes ☐ No ☐

COMMENTS:

PRODUCT FLOW RATE AS DETERMINED BY THE METERING PUMP OR AS DETERMINED BY FILLING AND CLOSING RATES. ..... Yes ☐ No ☐

COMMENTS:

ASEPTIC SURGE TANK STERILE AIR OVER-PRESSURE OR OTHER PROTECTIVE MEANS ..... Yes ☐ No ☐

COMMENTS:

PROPER PERFORMANCE OF STEAM SEALS OR SIMILAR DEVICES ..... Yes ☐ No ☐

COMMENTS:

THE STERILIZATION OF PROCESSING EQUIPMENT OR "PRE-STERILIZATION" CYCLE ..... Yes ☐ No ☐

COMMENTS:

PRODUCT STERILIZER OPERATION

START-UP – 113.40(g)(1)(ii)(a)

75. BEFORE THE START OF ASEPTIC PROCESSING OPERATIONS, ARE THE PRODUCT STERILIZER AND ALL PRODUCT CONTACT SURFACES DOWNSTREAM BROUGHT TO A CONDITION OF COMMERCIAL STERILITY? – 113.40(g)(1)(ii) ..... Yes ☐ No ☐

COMMENTS:

PRODUCT-TO-PRODUCT REGENERATOR – 113.40(g)(1)(ii)(c)

76. DO RECORDS INDICATE PRESSURE ON THE STERILE SIDE OF THE REGENERATOR LESS THAN 1 LB. PER SQ. INCH GREATER THAN PRESSURE ON THE NON-STERILE SIDE OF THE GENERATOR? ..... Yes ☐ No ☐

IF YES, WAS THE PRODUCT PROPERLY HANDLED AS A PROCESS DEVIATION? ..... Yes ☐ No ☐

IF NO, REPORT DETAILS UNDER THE CAPTION "PROCESS DEVIATIONS":

OTHER COMMENTS:

77. IS A PRODUCT-TO-PRODUCT REGENERATOR USED? ..... Yes ☐ No ☐

COMMENTS:

PROPER SPEED OF METERING PUMP – 113.40(g)(1)(i)(f)

78. WAS THE METERING PUMP OPERATING PROPERLY TO ASSURE NO MORE THAN THE MAXIMUM PRODUCT FLOW RATE (PROPER RESIDENCE TIME) IN THE HOLDING TUBE? ..... Yes ☐ No ☐

IF NO, WAS THE PRODUCT PROPERLY HANDLED AS A PROCESS DEVIATION? ..... Yes ☐ No ☐

IF NO, REPORT DETAILS UNDER THE CAPTION "PROCESS DEVIATIONS":

OTHER COMMENTS:

TEMPERATURE DROP IN PRODUCT STERILIZING HOLD TUBE – 113.40(g)(1)(ii)

79. WERE THERE ANY INCIDENCES OF TEMPERATURE DROPS IN THE HOLD TUBE BELOW THAT SPECIFIED IN THE SCHEDULED PROCESS? ..... Yes ☐ No ☐

IF YES, WAS THE PRODUCT PROPERLY HANDLED AS A PROCESS DEVIATION? ..... Yes ☐ No ☐

IF NO, REPORT DETAILS UNDER THE CAPTION "PROCESS DEVIATIONS":

OTHER COMMENTS:

BACK-PRESSURE VALVES/ORIFICES

80. WHERE ARE BACK-PRESSURE VALVES/ORIFICES LOCATED IN THE ASEPTIC PROCESSING SYSTEM?

81. HOW DOES THE FIRM MONITOR THE PROPER FUNCTIONING OF BACK-PRESSURE VALVES?

82. WERE BACK-PRESSURE VALVES OPERATING PROPERLY DURING THE INSPECTION? ..... Yes ☐ No ☐

IF NO, REPORT ANY INCIDENCES OF PROCESS DEVIATIONS UNDER "PROCESS DEVIATIONS":

OTHER COMMENTS:

LOSS OF STERILE AIR PRESSURE OR OTHER PROTECTIVE LEVELS IN ASEPTIC SURGE TANKS – 113.40(g)(1)(ii)(c)

83. WERE THERE ANY INCIDENCES OF LOSS OF COMMERCIAL STERILITY IN ASEPTIC SURGE TANKS BECAUSE OF LOSS OF STERILE AIR OVER-PRESSURE OR OTHER PROTECTIVE LEVELS? ..... Yes ☐ No ☐

IF YES, WAS THE PRODUCT PROPERLY HANDLED AS A PROCESS DEVIATION? ..... Yes ☐ No ☐

IF NO, REPORT DETAILS UNDER "PROCESS DEVIATIONS":

OTHER COMMENTS:

RECORDING DEVICE – 113.40(2)(i)(a)

84. ARE THE CONTAINER AND PACKAGING CLOSURE STERILIZATION SYSTEM AND PRODUCT FILLING AND CLOSING SYSTEM INSTRUMENTED TO DEMONSTRATE THAT THE REQUIRED STERILIZATION IS BEING ACCOMPLISHED CONTINUOUSLY? ..... Yes ☐ No ☐

COMMENTS:

85. IS THERE ANY DOCUMENTATION SHOWING THAT COMMERCIALLY STERILE CONDITIONS ARE ACHIEVED AND MAINTAINED? ..... Yes ☐ No ☐

COMMENTS:

86. IS THERE ANY DOCUMENTATION SHOWING THE VALIDATION OF STERILIZING CONDITIONS? ..... Yes ☐ No ☐

COMMENTS:

CONTAINER STERILIZING, FILLING AND CLOSING OPERATIONS – 113.40(g)(2)

EQUIPMENT

87. DO THE FIRM'S PROCEDURES ENSURE THAT THE CONTAINER AND CLOSURE STERILIZATION SYSTEMS AND THE PRODUCT FILLING AND CLOSING SYSTEMS ARE BROUGHT TO A CONDITION OF COMMERCIAL STERILITY BEFORE PACKAGING OPERATIONS BEGIN? – 113.40(g)(2)(ii)(a) ..... Yes ☐ No ☐

COMMENTS:

88. ARE THE CONTAINER AND CLOSURE STERILIZATION SYSTEMS AND PRODUCT FILLING AND CLOSING SYSTEMS INSTRUMENTED TO DEMONSTRATE THAT THE REQUIRED STERILIZATION IS BEING ACCOMPLISHED CONTINUOUSLY? – 113(g)(2)(i)(a) ..... Yes ☐ No ☐

COMMENTS:

89. ARE AUTOMATIC RECORDING DEVICES USED TO RECORD THE STERILIZATION MEDIA FLOW RATES, TEMPERATURE, CONCENTRATION OR OTHER FACTORS? – 113.40(g)(2)(i)(a) ..... Yes ☐ No ☐ N/A ☐

COMMENTS:

LOSS OF STERILITY – 113.40(2)(ii)(b)

90. IS THERE A SYSTEM THAT STOPS PACKAGING OPERATIONS OR ALTERNATIVELY SEGREGATES ANY PRODUCT PACKAGED WHEN PACKAGING CONDITIONS FALL BELOW SCHEDULED PROCESSES?..... Yes ☐ No ☐

COMMENTS:

91. IN THE EVENT THAT STERILITY IS LOST IN THE PACKAGING SYSTEM, IS THE SYSTEM RETURNED TO A CONDITION OF COMMERCIAL STERILITY PRIOR TO RESUMING PACKAGING?..... Yes ☐ No ☐

COMMENTS:

RECORDS – 113.40(g)(2)(ii)(c)

92. ARE OBSERVATIONS AND MEASUREMENTS OF OPERATING CONDITIONS MADE AND RECORDED AT INTERVALS OF SUFFICIENT FREQUENCY TO ENSURE THAT COMMERCIAL STERILITY OF THE FOOD PRODUCT IS BEING ACHIEVED, INCLUDING RECORDS OF:

STERILIZATION MEDIA FLOW RATES ..... Yes ☐ No ☐ N/A ☐

COMMENTS:

TEMPERATURES ..... Yes ☐ No ☐ N/A ☐

COMMENTS:

CONTAINER AND CLOSURE FLOW RATES ..... Yes ☐ No ☐ N/A ☐

COMMENTS:

STERILIZATION CONDITIONS FOR BATCH SYSTEMS ..... Yes ☐ No ☐ N/A ☐

COMMENTS:

METAL CONTAINERS AND LIDS

93. WHAT TYPE OF FILLING/PACKAGING SYSTEM IS BEING USED BY THE FIRM? ..... Yes ☐ No ☐

(FOR EXAMPLE, METAL CONTAINERS AND CLOSURES STERILIZED WITH SUPERHEATED STEAM, FILLED AND SEALED IN AN ASEPTIC CHAMBER)

94. DOES THE FIRM FOLLOW ITS FILED SCHEDULED PROCESS FOR BRINGING THE CONTAINER AND LID STERILIZATION EQUIPMENT TO A CONDITION OF COMMERCIAL STERILITY? ..... Yes ☐ No ☐

COMMENTS:

95. DETERMINE AND DOCUMENT THE NUMBER AND TYPE OF TEMPERATURE MONITORING SENSORS USED TO DEMONSTRATE THAT THE REQUIRED STERILIZATION IS ACCOMPLISHED:

96. ARE THESE THERMOCOUPLE SENSORS LOCATED IN THE MOST DIFFICULT TO STERILIZE AREA?..... Yes ☐ No ☐

COMMENTS:

97. IS THE POSITION OF THE TEMPERATURE SENSORS AND EQUIPMENT THE SAME AS THAT FILED WITH FDA?..... Yes ☐ No ☐

COMMENTS:

98. LIST THE CRITICAL FACTORS BEING MONITORED DURING THE STERILIZATION OF CONTAINERS, LIDS AND FILLING AND CLOSING EQUIPMENT (E.G., TEMPERATURE, STERILIZATION MEDIA FLOW RATE, ETC.):

99. IS THE MONITORING DATA FOR THESE CRITICAL FACTORS CONTINUOUSLY AND ACCURATELY RECORDED?..... Yes ☐ No ☐

COMMENTS:

100. DO INDICATING THERMOMETERS AGREE WITH RECORDING THERMOMETERS? ..... Yes ☐ No ☐

COMMENTS:

101. ARE TEMPERATURE INDICATING AND RECORDING DEVICES PROPERLY CALIBRATED? ..... Yes ☐ No ☐

IF YES, WHAT ARE THE CALIBRATION METHOD AND FREQUENCY?

102. IS TID CALIBRATION ACCOMPLISHED AT PROCESSING TEMPERATURE?..... Yes ☐ No ☐

COMMENTS:

103. IF COLD STERILE WATER IS DIRECTED AGAINST THE BOTTOM OF CONTAINERS AFTER FILLING (OR ONTO THE LIDS PRIOR TO CLOSING), WHAT ARE THE FIRM'S CONTROLS TO ENSURE STERILITY OF THE WATER ON A CONTINUAL BASIS?

104. DESCRIBE THE FIRM'S CONTROLS FOR ENSURING THE PROPER RESIDENCE TIME OF THE CONTAINERS AND LIDS IN THE STERILIZING MEDIUM:

(FOR EXAMPLE, CONTAINERS/CLOSURE FLOW RATE CHECKED WITH A CALIBRATED STOPWATCH)

105. WHAT ARE THE METHOD AND FREQUENCY FOR TIMING DEVICE CALIBRATION?

106. WHAT IS THE METHOD OF PREVENTING UNAUTHORIZED CHANGES IN CONTAINER/LID FLOW RATE DURING STERILIZATION?

107. IF AN AUTOMATIC DEVICE IS USED TO MONITOR CONTAINER/CLOSURE FLOW RATES, HOW DOES THE FIRM ASSURE THE ACCURACY OF THESE DEVICES?

108. HOW DOES THE FIRM ASSURE THAT CONTAINERS AND CLOSURES ARE CLEAN AND DRY PRIOR TO ENTERING THE STEAM CHAMBERS?

GLASS, PLASTIC AND PAPERBOARD CONTAINERS

109. WHAT TYPE OF FILLING/PACKAGING SYSTEM IS BEING USED BY THE FIRM?

(FOR EXAMPLE, TETRAPAK PAPERBOARD FORM/FILL/SEAL USING HYDROGEN PEROXIDE AND HEAT AS STERILANTS; PRE-FORMED MULTI-LAYERED PLASTIC CUPS STERILIZED, FILLED AND SEALED IN AN ASEPTIC CHAMBER USING HYDROGEN PEROXIDE AND HEAT AS STERILANTS; GLASS BOTTLES FILLED AND SEALED IN AN ASEPTIC CHAMBER USING STEAM AS A STERILANT; PLASTIC CUPS BLOW MOLDED/FILLED, SEALED AND STERILIZED IN THE MOLD. INCLUDE THE MANUFACTURER AND MODEL NO. OF THE ASEPTIC FILLING MACHINE.)

110. HOW IS HEAT APPLIED FOR CONTAINER STERILIZATION?

111. DESCRIBE THE FIRM'S PROCEDURE FOR MONITORING ALL CRITICAL FACTORS FOR THE SCHEDULED PROCESS:

112. ARE SENSORS FOR MONITORING THE ABOVE CRITICAL FACTORS PROPERLY LOCATED TO PROVIDE ASSURANCE THAT THE FACTORS ARE MONITORED AT THEIR COLDEST OR WEAKEST POINT? ..... Yes ☐ No ☐

COMMENTS:

113. IF CHEMICAL STERILANTS ARE SPRAYED IN ASEPTIC CHAMBERS, ARE SPRAY VOLUMES CONTROLLED BY:

Nozzles ☐ Peristaltic Pumps ☐

Other ☐ _____

COMMENTS:

114. WHAT IS THE FIRM'S PROCEDURE FOR ASSURING THE USE OF PACKAGING MATERIALS OF HIGH MICROBIOLOGICAL QUALITY?

115. ARE THE FILLING/PACKAGING MACHINES DESIGNED TO AUTOMATICALLY SHUT DOWN IN THE EVENT OF A FAILURE TO MEET SPECIFIED CRITICAL FACTORS? ..... Yes ☐ No ☐

COMMENTS:

116. WHO CHECKS THE AUTOMATIC CONTROLS AND HOW FREQUENTLY?

117. HOW DOES THE FIRM CHALLENGE THE AUTOMATIC CONTROL SYSTEM?

118. UNDER WHAT CIRCUMSTANCES WOULD AN AUTOMATIC MACHINE BE OPERATED IN A MANUAL MODE TO PACK PRODUCT AND WHO WOULD HAVE THE AUTHORITY TO APPROVE THIS?

119. ARE THERE ANY MANUAL CONTROLS THAT ARE CRITICAL TO THE SCHEDULED PROCESS? ..... Yes ☐ No ☐

IF SO, HOW WOULD A PROCESS DEVIATION BE DETECTED AND HANDLED BY THE FIRM?

OTHER COMMENTS:

120. DESCRIBE THE FIRM'S PROCEDURE FOR TESTING HYDROGEN PEROXIDE RESIDUAL ON PACKAGING MATERIAL:

121. IS THE HYDROGEN PEROXIDE RESIDUAL LEVEL (FROM RECORD REVIEW) IN COMPLIANCE WITH PART 178.1005(d)? ..... Yes ☐ No ☐

COMMENTS:

THERMOFORM-FILLED-SEALED PLASTIC CONTAINERS PRE-STERILIZED BY HEAT OR CO-EXTRUSION:

122. WHAT TYPE OF FILLING/PACKAGING SYSTEM IS BEING USED BY THE FIRM?

(FOR EXAMPLE, MULTI-LAYERED PLASTIC WEB IS DIPPED IN HYDROGEN PEROXIDE BATH AND THEN HEATED AND FORMED INTO CUPS/FILLED/SEALED WITH FLEXIBLE LIDSTOCK IN AN ASEPTIC CHAMBER — BOTH BODY AND LID STERILIZED BY HYDROGEN PEROXIDE AND HEAT BEFORE FILLING.) INCLUDE THE MANUFACTURER AND MODEL NO. OF THE ASEPTIC FILLING MACHINE.

123. DESCRIBE THE FIRM'S PROCEDURES FOR MONITORING ALL FACTORS CRITICAL TO THE SCHEDULED PROCESS:

124. FOR STERILE AIR THAT PROVIDES OVERRIDING AIR PRESSURE DURING PROCESSING OPERATIONS, HOW OFTEN ARE THE AIR FILTERS CHANGED AND DOES THIS FREQUENCY COMPLY WITH THE FREQUENCY DELINEATED IN THE SCHEDULED PROCESS? ..... Yes ☐ No ☐

COMMENTS:

125. IS THE CHANGE OF AIR FILTERS DOCUMENTED? ..... Yes ☐ No ☐

COMMENTS:

126. FOR MULTI-LAYERED CONTAINER BODIES AND LIDSTOCK DURING F/F/S OPERATIONS WHERE THE OUTER LAYER IS STRIPPED AWAY TO EXPOSE AN INNER STERILE LAYER, HOW DOES THE FIRM ENSURE PROTECTION OF THE STERILE INNER LAYER AS THE PACKAGING MATERIAL IS RECEIVED AND USED?

127. DESCRIBE THE FIRM'S PROCEDURE FOR ENSURING THAT EQUIPMENT IS BROUGHT TO A CONDITION OF COMMERCIAL STERILITY AND THAT EXPOSURE OF THE STERILE INNER LAYER TO THE STERILE ZONE AT THE BEGINNING OF THE PRE-STERILIZATION CYCLE IS PERFORMED IN SUCH A MANNER AS TO MAINTAIN THE STERILITY OF BOTH THE PACKAGING MATERIAL AND THE STERILE PACKAGING AREA:

128. DESCRIBE THE PACKAGING SYSTEM, INCLUDING THE MANUFACTURER, MODEL NO., OPERATION OF THE FITMENT, MEDIA USED TO STERILIZE THE FITMENT AND HOW THE STERILIZATION PROCESS AND ALL CRITICAL FACTORS SPECIFIED IN THE SCHEDULED PROCESS ARE CONTROLLED AND MONITORED:

129. HOW IS THE MULTI-LAYERED PLASTIC CONTAINER STERILIZED?

(FOR EXAMPLE, THE BAG IS PRE-STERILIZED FOR THE SUPPLIER BY AN OUTSIDE CONTRACTOR USING GAMMA RADIATION.)

130. HOW DOES THE FIRM ASSURE THAT STERILE PACKAGING MATERIALS ARE RECEIVED AND MAINTAINED STERILE?

131. IF CHEMICALS ARE USED TO STERILIZE THE FITMENT, HOW IS THE CHEMICAL CONCENTRATION MONITORED?

132. DESCRIBE THE FIRM'S PROCEDURE FOR ENSURING THAT EQUIPMENT IS BROUGHT TO A CONDITION OF COMMERCIAL STERILITY PRIOR TO THE START OF FILLING:

INCUBATION – 113.40(3)

133. EXPLAIN THE INCUBATION PROCEDURES USED BY THE FIRM, INCLUDING THE NUMBER OF SAMPLES, INCUBATION TIME AND TEMPERATURES, AND THE FOLLOW-UP PROCEDURES FOR ANY POSITIVE RESULTS:

PROCESS DEVIATIONS – PART 113.89

134. ARE PROCESS DEVIATIONS MAINTAINED IN A SEPARATE FILE OR LOG? ..... Yes ☐ No ☐

COMMENTS:

135. REVIEW RECORDS DOCUMENTING PROCESS DEVIATIONS (INCLUDING PROCESS DEVIATION FILE):

COMMENTS:

136. WHAT ARE THE FIRM'S PROCEDURES FOR HANDLING PROCESS DEVIATIONS?

(FOR EXAMPLE, A DROP IN PRODUCT TEMPERATURE IN THE HOLDING TUBE OR OF DIFFERENTIAL PRESSURE IN THE PRODUCT-TO-PRODUCT REGENERATOR BELOW SPECIFIED LIMITS.)

137. WERE ALL PROCESS DEVIATIONS HANDLED IN ACCORDANCE WITH THE FIRM'S PROCEDURES AND PART 113.89? ..... Yes ☐ No ☐

COMMENTS:

CONTAINER CLOSURE EVALUATION – Part 113.60(a)(1) and (3)

138. DO THE FIRM'S CONTAINER INTEGRITY EVALUATION PROCEDURES COMPLY WITH THE VISUAL AND TEARDOWN REQUIREMENTS OF PART 113.60(a)(1) AND (3)? ..... Yes ☐ No ☐

COMMENTS:

139. DESCRIBE THE FIRM'S CONTAINERS AND ITS PROCEDURES FOR ENSURING CONTAINER INTEGRITY:

(INCLUDE THE FIRM'S HANDLING, SAMPLING AND TESTING OF INCOMING CONTAINERS AND PACKAGING MATERIALS, AND ITS VISUAL AND TEARDOWN TEST PROCEDURES FOR FINISHED PRODUCT CONTAINERS TO ASSURE CONTAINER INTEGRITY.)

POST-PROCESS CONTAINER HANDLING

140. ARE CONTAINERS PROPERLY HANDLED DURING THEIR CONVEYANCE FROM FILLING AND PROCESSING AREAS OF THE PLANT TO WAREHOUSE LABELING AND STORAGE AREAS TO ASSURE MAINTENANCE OF PACKAGE AND SEAL INTEGRITY? ..... Yes ☐ No ☐

COMMENTS:

141. DESCRIBE THE FIRM'S POST-PROCESS HANDLING PROCEDURES:

TRAINING – Part 113.10

142. HAS THE FIRM MET THE REQUIREMENTS OF PART 113.10 FOR ATTENDANCE AT BETTER PROCESS CONTROL SCHOOL?..... Yes ☐ No ☐

COMMENTS:

143. DESCRIBE THE FIRM'S TRAINING PROGRAM FOR OPERATORS OF PRODUCT AND PACKAGE STERILIZATION SYSTEMS: