Checklist Salmonella control crushing version 1.0

This check list is a tool for the operator to check and optimize his production process in such a way to minimize the risk of Salmonella contamination. Not al actions mentioned in this list are necessary applicable. Based on his risk- assessment the operator will determine the audit frequency. The suggested frequency is every 6 months.

Minor- a partial failure to implement a Salmonella related requirement or poor evidence to demonstrate implementation
Major- A complete failure to implement a Salmonella related requirement or a failure that may result in unsafe feed. A minor non conformity of a previous audit that has not been addressed.
Critical- a regulatory violation, feed safety failure resulting in unsafe feed

Company :		**Total score % (max 100%)**	**0**
Location:		**Number of minors= Y**	**0**
Date :		**Number of major= O**	**0**
Auditor:		**Number of critical= R**	**0**
		Number of conform= G	**0**

		Questions	Score	Comments
1	**1. Management**	Has the management formulated an action plan with the aim to reduce Salmonella contamination as part of its feed safety management system?		
2		Are adequate resources made available by the higher management in order to address weaknesses in the PRP program affecting Salmonella contamination?		
3		Are the Salmonella results and reduction part of the annual management review?		
4		Is there a written action plan in case Salmonella is found?		
	Findings			
5	**2. Training**	Does the HACCP team have good knowledge regarding Salmonella control and the measures to control and minimize Salmonella in the processing environment?		
6		Does the training of the staff include HACCP training, including the risk of Salmonella contamination during processing, material handling, storage and maintenance?		
7		Is the staff well aware of the parameters and limits related to the process in order to minimize Salmonella contamination?		
8		Is the staff trained on the corrective actions and procedures in case the process is out of control?		
9		Does the training include the importance of environmental and personal hygiene?		
10		Is the responsible staff trained in sample taking ?		
11		Is the reponsible staf trained in the cleaning and disinfection methods for the facility and equipment?		

12		Are external maintenance contractors well aware of the good hygiene practices required?		
13		Is the effectiveness of the training tested?		
	Findings			
14	**3. Facilities**	Are the facilities of the appropriate design and lay-out, construction and size to minimize the risk on Salmonella contamination?		
15		Are the factory surroundings orderly and clean and in such a state to minimize the risk on Salmonella contamination?		
16		Is there sufficient segregation between the raw materials area and the area after the desolventiser- toaster in order to prevent (re) contamination?		
17		Do floors, walls and ceilings meet the production requirements and avoid the possible build up of dirt which could lead to Salmonella contamination (prevent dust accumulation and prevent pest harbourage)?		
18		Are the walls and ceilings free of condensation?		
19		Where there is a closed building, are all doors and windows closed in order to prevent pest entering which could lead to Salmonella contamination?		
20		Are preventive measures in place to avoid contamination of the air at intake for the dryer- cooler section? (is the air used for drying/cooling adequately for the location?)		
21		Are preventive measures in place to avoid contamination of the air at intake for aspiration system?		
22		Is the aspiration of the meal conveyors working properly in order to avoid condensation?		
23		Are the storage units well ventilated in order to avoid condensation which could lead to a Salmonella contamination of the product?		
24		Is the build up of feed materials avoided? (e.g. dead ends)		
25		Is all conveying equipment closed to prevent contamination ?		
26		Is the loading area closed when not in use?		
	Findings			

27	**4. Pest control**	Is a pest control programme in place?		
28		Has the pest programme been formulated with the aim to minimize possible Salmonella contamination by birds/ rodents/ insects?		
	Findings			
29	**5. Maintenance**	Is the plant maintenance organised in such a way that it does not increases the risk for Salmonella contamination or improves growth conditions? (focus on equipment after DT)		
30		Is the facility inspected on a regular basis in order to identify short comings in order to guarantee a sound structure? (focus on equipment after DT)		
	Findings			
31	**6. Equipment**	Is equipment designed and installed in such a way that it is suitable for cleaning?		
32		Is the system checked on condensation spots?		
33		Are all possible condensation spots clearly identified?		
34		Is the processing line well insulated where necessary?		
34		Are potential cold bridges identified and well insulated?		
35		Is the isolation of sufficient thickness ?		
36		Where there is a need for it, based on a risk assessment, is a mesh air filter on the air intake and outlet installed?		
37		Are the filters appropriate and cleaned on a regular basis?		
38		Are the dust extractors and collectors cleaned regularly (based on a risk assessment) and working properly?		
38		Are meal conveyors "dead ends" cleaned in order to avoid possible Salmonella contamination?		
39		Is the dosing equipment for disinfectant and water suitable for the purpose and calibrated?		
	Findings			

40	**7. Process**	Are written procedures available defining, controlling and verifying the limits in the manufacturing process regarding Salmonella?		
41		Are the process limits clearly defined?		
42		Is process control and documentation in place for the temperature during heat treatment in the desolventiser-toaster?		
43		Is process control and documentation in place for the meal temperature after dryer- cooling section?		
44		Is a risk assessment made in order to evaluate and define the maximum delta T of the product after the cooler section and the atmosphere in order to avoid condensation?		
45		Are corrective actions formulated in case the delta T is higher than the defined maximum difference?		
46		Is the stream of products added back to the meal (e.g. gums) well controlled in order to avoid fluctuations in the meal moisture?		
47		Is continuous or regular control of the moisture content of the meal in place and documented?		
48		Is the risk of Salmonella contamination by bringing hulls back on the meal under control?		
49		Is in case of chemical treatment the use of the chemical substances monitored and documented?		
50		Is any spillage re-cycled through the heating step?		
51		Are corrective actions in place and documented when processing limits are exceeded? (The review of the processing limits (heat treatment, water content, T meal after cooler), review calibration status, review PRP programme, cleaning or disinfection of the factory/ production line, changes in the process or procedures and/ or additional training).		
	Findings			
52	**8. Cleaning and disinfection**	Is a master sanitation schedule in place to assure timely and effective sanitation of the equipment, processing environment, storage and loading area?		
53		Is the processing environment clean? Especially the process area after the Desolventizer- Toaster(DT)		
54		Is the equipment cleaned at regular intervals, including transport belts, elevators and the storage bins for the aspiration?		
55		Are wet or dry cleaning methods defined for the environment and production line?		
56		Are the disinfection methods defined for the environment and production line?		
57		Is the cleaning and disinfection material appropriate for the task and in good condition?		

	Findings			
58	**9. Monitoring, sampling and analysis**	Is a Salmonella monitoring programme in place based on a risk assessment, by product and process, in order to control the inline monitoring, environment and finished product?		
59		Is the monitoring plan targeted at pre- defined areas and equipment, focusing on the relevant areas, from the heating step up to the loading of the protein meal?		
60		Are in addition samples taken from product deposit (like dust) after the heating step, e.g. from equipment, cyclones, conveyors, silo's based on a risk assessment, previous results and type of process?		
61		Are samples taken from the hulls after de- hulling?		
62		Do you take samples from the dust collectors (after DT), where appropriate, for analysis on Salmonella ?		
63		Are samples taken from the protein meal at the point of loading, based on a risk assessment, but at least once a week?		
64		Are the samples serotyped in case of an incidence?		
65		Is the data submitted to FEDIOL in the framework of the Salmonella data collection programme?		
66		Are the samples for the FEDIOL data collection programme analysed by a lab, using and accredited for the ISO method 6579?		
67		Are the samples of 25 g for internal analysis tested without delay according to ISO method 6579 or equivalent?		
68		Are the necessary corrective actions determined, based on the outcome of the inline monitoring process?		
69		Are the defined corrective actions implemented when applicable?		
70		Is the effectiveness of the corrective actions verified for the period of one week and are the Salmonella findings negative. If not, is the process repeated until no Salmonella is found for the period of one week?		
71		Are the records of sampling and analysis on Salmonella control kept for at least five years and do they provide the information on the samples taken (identification and date), any isolation or serotype and corrective action taken?		
72		Is the Salmonella monitoring plan regularly reviewed (Salmonella status) and is a target for improvement formulated?		
	Findings			
73	**10. In case of Salmonella positive**	Are written procedures available defining what to do in case of a Salmonella incidence?		

74	positive	In case of an incident with a critical serotype, has this been communicated to the customer?		
75		In case of an incident is the communication to authorities done ?		
76		Is sampling and analysis carried out daily for at least seven days until the process is verified as safe regarding Salmonella?		
77		Are the previous monitoring results taken into consideration?		
78		Are the processing conditions reviewed regarding Salmonella?		
79		Has a root cause analysis been made?		
80		Is the source of contamination identified and eliminated?		
82		Has the prerequisite program been reviewed?		
83		Has additional cleaning and disinfection of the facilities, equipment and storage been performed, where appropriate?		
84		Is the process revalidated in case changes have been made to the process?		
85		Are additional training or changes to the process of procedures considered?		
	Findings			