



Introduction Food Plant Micro-Mapping

A Strategic Food Safety First Approach

“ To effectively manage your plants process flow, food safety professionals rely on strategic micro-mapping for communication and industry leading environmental management execution” -**Food Industry MMP Workshop Speaker FSQS 2013**



Food Plant Micro-Mapping 101:

- **What is micro-mapping (MMP):** Strategic approach to managing your facilities environmental/process-flow through comprehensive review, analyzation, collaboration to achieve maximum food safety excellence and an employee engaged culture
- **Why should I consider developing a plan:** To remain proactive in your approach to process improvement in-order to achieve food safety for your product, customer, and sanitary plant conditions.
- **What considerable advantages do I gain with a plan-in-place:** Your plant will gain insight throughout all aspects of your process flow in order to implement improvements to your environmental (EMPC) program, productivity, employee engagement, and increase transparency throughout all levels of your plant location.
- **Will I need corporate approval for starting a baseline plan & procedure?** No. Micro-Mapping your facility runs hand in hand to your already regulated HACCP plan. Micro-Mapping is an approach one step further beyond already highly regulated guidelines you adhere to each day.
- **Why are so many large food corporations implementing these plans and I have not heard of such a plan?** Each company rolls-out their yearly in-plant quality initiatives differently. Some company's remain ahead of the times, and some prioritize differently.
- **How do I get started?** Slides 3-7 will outline basic steps to achieve a stage 1 micro-map plan, and with a little help from DeVere's industrial professionals you can achieve your MMP with the expertise industry professionals have relied on for over 60 years,





DeVere Micro-Mapping-Plan (MMP) Basics

- Understand your plant lay-out- Overall plant map layout review- Including your comprehensive *HACCP Plan Flow Diagram*
- How many lines run adjacent to each other?
- Does your product go through a kill-step? (**If so was your kill-step validated through lethality studies?*)
- How many of your plant personnel work in your processing/packing department?
- How is your environment? E.G. Dry/High wet medium-low moisture
- How many locations in your products flow go through “open or exposed” areas before final product packaging/corrugated process?



DeVere Micro-Mapping-Plan (MMP) Basics

PPCA & GMP Area Breakdown

PPCA (Primary Pathogen Control Areas)

PPCA categorization includes the products most “vulnerable” location(s) in the facility during the journey towards final packaging/distribution.

These areas CAN include:

- RTE (ready to eat) areas
- Post lethality process flow
- Pre-Packaging Areas (i.e. cooling tunnels, spiral freezers, enrobing machines, bag-filler weight packaging).

Basic GMP Areas

Basic “GMP” areas include all areas pre-lethality, and ALL employees *must* follow their basic *Good Manufacturing Practices*.

These areas CAN include:

- Processing “kitchen” areas (Pre-Lethality)
- All processing/RAW personal.
- RAW Logistics personal (e.g. fork-truck drivers who stage raw ingredients for mixing blend/preparation, palletizing shrink-wrap operators, Processing TL)
- RAW area Maintenance Technicians



Primary Pathogen Control Areas VS Basic GMP Areas -Analyze Your Plant-

WHY-WHY Analysis: Below are questions for use during a group why-why analysis. Have the scribe utilize a white board/presentation pad for this exercise.

- PPCA & GMP:** how many people work in these areas? *Automation VS Human Ratio*
- u wait for an issue to arise communicated from an sanitation employee or do you self investigate proactively?
- GMP:** Are monthly GMP audits being conducted in these areas? (are there any over-due corrective actions still active?)
- PPCA:** What preventative controls are currently in place?
- GMP:** Are these employees vectoring themselves from their RAW areas into RTE-PPCA locations? (e.g. how do they get to the break rooms/bathrooms/drinking fountain/hand wash stations)
- PPCA:** Are maintenance technicians supporting both GMP/PPCA areas? (e.g. are they using the same tools?)
- PPCA:** How many times a week do you facilitate cleans? (e.g. do you introduce full wet wash frequently?)
- GMP:** Are the fork-truck operators driving a dedicated RTE truck or at least sanitizing their wheels in between different processes throughout the plant?
- PPCA:** How many areas have “open” conveyors or full exposure before packaging?
- PPCA&GMP:** How many environmental swabs are conducted in both areas monthly? (are there a particularly difficult areas requiring multiple escalated corrective actions?)
- PPCA&GMP:** how often are SSOP’s reviewed for efficacy other than the standard once a year? (do you look for areas of improvement or do you wait until an issue is brought to your attention?)

Plant Awareness	GMP	PPCA
High Risk Potential (1-10)	1-5?	5-10?
Personal in Area	15+?	25+?
Preventative Controls in-Place	?	??





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Development of your plant MMP

Per your team building exercise discovering WHY and WHAT you do at your plant, break down each of your “root cause” outcomes into two categories.

-PPCA- Areas/preventative controls in-place or future capital improvement opportunities

-Basic GMP- Increase the vigor put into your GMP auditing; increase GMP refresher training with ALL shifts working in these areas.

- Develop your PPCA/GMP *areas opportunities for improvement* approach with detailed notes/ Excel tracker. Continue to monitor these areas while sustaining your MMP moving forward to build a case for the next years capital investment meeting with senior plant leadership. Be sure to emphasize your concerns with FACTS not “I Wish statements”
- In ALL PPCA areas each preventative control shall be monitored and thoroughly reviewed on a determined frequency to ensure effectiveness.
- Develop a “new” plant layout map with outlined PPCA/GMP areas clearly defined. This information must be shared with all plant leadership including ALL on-the-floor plant supervisory/Team Lead levels first. Be sure to detail each level of your plan, and be sure to ask your shift supervisors what they would expect their team members might ask about the new plan so they can have a clear and concise explanation to keep communication uniform across all shifts.
- **TRUST YOUR TEAM.** Schedule a shift/plant wide meeting to communicate the new plan to all team members throughout the facility (including any and ALL temp labor). This is one of the most important steps of developing your MMP plan. All your hard work will be for nothing if you do not effectively communicate this plan to the folks that are responsible to adhering to it.
- Sustainability and plan improvements through your annual plant procedure review will be how you buff your entry level MMP into an Industry Leading Micro/Environmental management masterpiece. (*see slide 7 for example of plant layout)



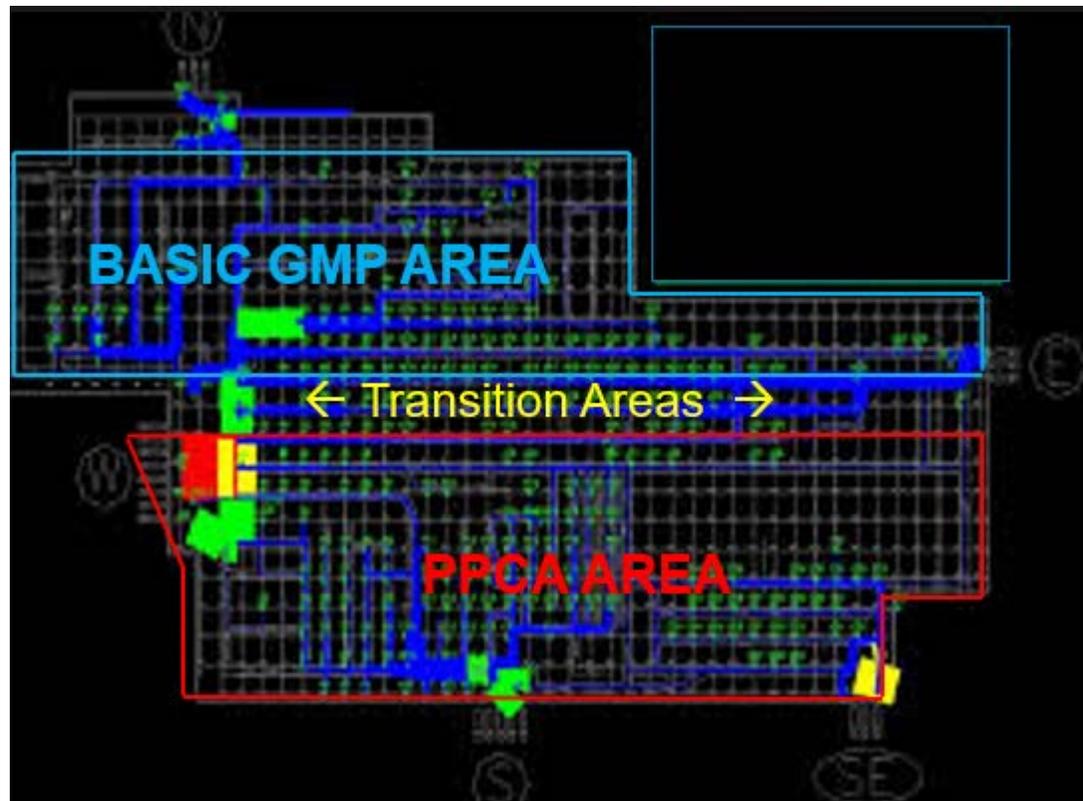
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Micro-Mapping-Plan (MMP) Basics

Plant Layout Without Boundaries



Plant Layout With Clear Defined Boundaries



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- A phone call or e-mail away...
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