

ALIGNMENT OF INDUSTRY-ORIENTED SANITATION PROGRAM¹

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Everyone will agree that there are many ways to set up an effective industry sanitation program. Therefore, I will briefly mention some of these ways, and then take a detailed look at our program. It should be pointed out from the beginning that no matter what program is followed, sanitation in a plant remains the responsibility of management. The active interest, desire, and support of top management is essential. Without this support, the sanitation program is destined to fail. A plant manager can assume the sanitation responsibility, and take complete charge of the program, or he can delegate the sanitation responsibility: (a) to the engineering division, where the Plant Engineer is given complete charge of the sanitation program, (b) to the Production Department, where the Production Superintendent is given complete charge of the sanitation program, (c) to the Sanitation Department where the Plant Sanitarian, as a department head, is given complete charge of the sanitation program, or (d) to an outside sanitation "service."

MANAGEMENT SUPPORT

The management support for our sanitation program starts at the general office level, with a general office sanitation committee. The President of the company is the chairman of the committee, and the Director of Sanitation is co-chairman. Every general office department head is an active member of this committee. This same basic organization pattern is followed for the regional and plant sanitation committees.

The general office sanitation committee's function is to establish company sanitation policy, provide direction and check performance. Through the Director of Sanitation's office, the basic program is carried forward to the plants through the assistance of the field Sanitation Supervisors. In addition, each department head works through his regional counterpart on common sanitation problems. The regional sanitation committee's function is to set up a sound regional follow-up program for sanitation, to ensure that all plants in the region are maintained at the highest level of *continuous sanitation* by following established company policy. The plant committee's

function is to carry out the sanitation program as established by company policy, and maintain the plant at the highest level of *continuous sanitation*.

PLANT SANITARIAN

In all of our plants, the responsibility of sanitation is delegated to a Plant Sanitarian who, as department head, works directly for, and answers to, the Plant Manager. I refer to our plant sanitation program as *continuous sanitation*. By this we mean the continuous preservation of clean surroundings, created by the subconscious natural or instilled quality within the individual, which demands orderliness and cleanliness.

THE SANITATION PROGRAM

The first step in our sanitation program begins with an orientation program for all new employees, which consists of a meeting with each department head. During the meeting with the Plant Sanitarian, our sanitation program is reviewed, the importance of personal cleanliness and sanitary working habits is outlined, and each individual's contribution to the sanitation effort, and the importance of cooperation from all employees, is stressed.

The next step in our sanitation program is training. Basically, this consists of on-the-job training and home study, through the use of a series of sanitation bulletins. This program is followed in training Sanitarians and Sanitors, and with slight modifications is used to give sanitation training to Managers, Sales Managers, Superintendents, Engineers and other supervisors. Visual aids, such as film strips, hand-out flyers, and bulletin board posters are also used to impart sanitation training to the rank and file. I briefly mentioned earlier, that each plant has a sanitation committee. This committee consists of each plant department head.

A brief description of the way each department cooperates to maintain a clean and orderly bakery follows: (a) the Manager gives the sanitation program proper backing, and allows sufficient budget, (b) the Sanitarian organizes and gives direction and guidance, and follows through on all sanitation activities in the plant, (c) the Shop Superintendents develop and instill clean working conditions and personal habits in their people, (d) the Plant Engineer installs sanitation aids, and maintains the physical condition

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of the equipment and buildings, (e) the Garage Superintendent maintains clean trucks, both inside and out, and a clean and orderly shop, (f) the Sales Supervisors instruct salesmen in truck, garage, personal, and sales room cleanliness, (g) the Office Manager instructs his people in clean work and personal habits regarding lunch room, locker rooms, and storage rooms; he also helps the sanitarian with proper accounting in order to control costs, (h) the Receiving Clerk inspects incoming ingredients and maintains proper storage and rotation of all stock, (i) the Personnel Manager recruits qualified personnel, and assists in our training program, and (j) the Shipping Room Supervisor instructs his people in clean working habits, and maintains a shipping schedule to minimize congestion in the plant.

INSPECTION

The committee holds a weekly meeting, after making a joint brief inspection of a preassigned area of the plant. Each individual makes notes of his inspection, and these notes are summarized for follow-up by the department head responsible. The plant is divided into 7 areas, so that the entire plant is covered every 2 months. On the eighth week, these inspections are reviewed and the plant sanitation committee makes a sanitation rating of the plant. The rating system used is similar to that used by the American Institute of Baking (AIB), in their inspection of our plants. These inspections will be discussed in more detail later. We feel that the committee meetings improve the cooperation between departments, and further trains the supervisors by making them aware of problems in other departments. As mentioned earlier, the responsibility for sanitation in our plants is delegated to the Plant Sanitarian. Rather than discuss in detail the many duties of the sanitarian, I will limit my comments to the key points of the program. I briefly mentioned the inspections made by the plant sanitation committee. Other inspections made by the sanitarian include a daily eye-level inspection of the entire plant. Infractions noted on this inspection are listed in the sanitarian's daily log.

This report is used by the sanitarian to keep the manager informed of the every day conditions during their daily contact period. In addition to the plant sanitation committee's inspection, and the daily eye-level inspection, the sanitarian also makes a daily comprehensive inspection of an area of the plant. In this way, he is acting as a "resident" AIB inspector, thoroughly inspecting the entire plant every two months. The infractions noted on these inspections are recorded, and the respective department heads are informed for proper follow-up. These infractions are also used by the plant sanitation committee in

assigning the sanitation rating for the plant for the respective two month period.

The rating system is an arbitrary method of expressing the sanitation level existing within a plant (superior—900 to 1000 points, excellent—800 to 899, satisfactory—725 to 799, passable—650 to 724, unsatisfactory—below 650). The rating is determined by appraising 5 sanitation categories, each of which has equal weight of 200 points. (Sanitation categories: (a) adequacy of sanitation program, 200 points; (b) pest control, 200 points; (c) operational methods and personnel practices, 200 points; (d) maintenance for sanitation, 200 points; and (e) cleaning methods, 200 points). It has been our experience that the infractions noted in these inspections generally follow a 5%, 5%, 30%, 30%, and 30% pattern, respectively, for these categories. The infractions noted, and their severity, take away from the numerical score for that category. The plant rating is determined by using the total point score of all categories.

If a situation exists where there is a serious breakdown in the sanitation program, whereby the finished product is likely to become contaminated, the plant may be assigned an unsatisfactory rating. If this should happen during an AIB inspection, a "re-inspection" of the plant is made generally within 90 days.

The basic rating system is followed by the AIB field sanitarians that inspect our plants. I might add that the AIB inspections are an integral part of our sanitation program, and these unannounced inspections are made more or less on a yearly basis. These inspections give us an independent unbiased audit of the plant's sanitation, and they provide us with the information to determine if the individual plant's program is in compliance with company standards. The AIB inspection also serves as an educational opportunity for the plant personnel to take advantage of the field sanitarians' experience and training in finding practical answers to existing problems, and advise regarding potential problems.

The reports of each plant's AIB inspections are sent to the general office. Each report is reviewed by the Director of Sanitation, who makes appropriate comments, and forwards his comments (with copies of this report) to the regional Vice-President, then forwards copies of the inspection to the Plant Manager, asking him to make a detailed report, within 30 days, of the corrective action taken on each item as listed to the Director of Sanitation. As the AIB reports are circulated to members of the general office sanitation committee, the various department heads work through their regional counterparts on problems in their area of responsibility.

Other inspections of our plants are conducted by the Food and Drug Administration, military, state,

and local authorities. The sanitarian must be thoroughly familiar with company policy regarding these inspections, and he is one of the key people who must accompany these inspectors in our plants.

LABOR COSTS IN SANITATION

Since labor represents approximately 95% of the sanitation costs, it is imperative for the sanitarian to maintain maximum control of his labor costs. This control can be accomplished through proper scheduling of each sanitor's work routine, both "daily" and "periodically." The daily work schedule is a station or area schedule which is posted in the area where the man works. This schedule includes the working hours, work to be done, and the method of cleaning.

A sanitor's duties, other than daily or periodical work, is assigned from the items noted during the various inspections, or is taken from a master work book. These duties are listed on the sanitor's special assignment sheet.

The master work book is a listing of all cleaning jobs that are not done on a daily basis. These jobs include both equipment and structural cleaning. The cleaning frequency, which may vary weekly or yearly or longer is also listed. As each job is completed, the date is noted in the appropriate space.

As our plants have become larger, the need to prevent wasting of valuable time by the sanitors, in making frequent trips to and from a central stock room, became obvious. We are now using individual sanitor carts in many of our plants. They are metal carts on wheels, provided with a lock and key, and each cart is numbered and assigned to a sanitor. Each cart is fully equipped with almost all of the tools and supplies needed to do the various cleaning jobs.

RECEIVING GOODS

In many plants, the responsibility for receiving is under the sanitarian. In other operations, particularly our larger ones, this responsibility is given to a receiving clerk who is a department head. In either case, the control of foreign material is a very important job of the bakery sanitarian, and this control must begin with the receipt of ingredients. A visual examination of all incoming ingredients is made immediately after the delivery vehicle is opened. This examination of the outside of bags or cartons is for physical damage, and foreign substances such as grease spots or stains, as well as for evidence of insects and rodents. An ultra-violet, or so-called "black light," is used to pin-point evidence of rodent contamination. Rejection of shipments is frequently made, based on the findings of these examinations.

All finely ground materials are examined upon re-

ceipt by sifting samples through 30-mesh screen. Four bags from a carload shipment are selected at random for sifting, and if any foreign material is found (such as a live or dead insect), 6 additional bags are sifted to determine the degree of contamination, and whether the lot should be considered for rejection. A record is kept of each lot examined. Foreign material may also reach the ingredients after their arrival in the plants. Therefore, our checkpoints for foreign material control must include the ingredients while in storage, and at the point of use in the shops. The last line of defense in foreign material control must be production practices, which prevent the incorporation of foreign material in the finished product. This requires departmental cooperation in the development of good working habits.

CHECK ON "TAILINGS"

The sifter of the plant flour handling system also contains a 30-mesh screen, and the "tailings" obtained are checked on a daily basis. A record is kept of these findings, and are reported weekly to the regional and general offices. Any adverse findings are brought to the attention of the purchasing department, and the flour mill that is involved.

BULK HANDLING

With the increase in bulk handling of more dry and liquid ingredients, increased sanitation responsibility in this area becomes a necessity. The use of common carriers, inspection of the delivery vehicles, use of filters, handling of the product in the plants, and the cleaning of the bulk handling equipment all require detailed study to avoid potential problems of product contamination and product quality deterioration. The use of bulk ingredients has also increased the need for inspection of these suppliers' manufacturing facilities.

TESTS ON INGREDIENTS

Selected ingredients are routinely sampled and sent to our research laboratories for analysis. In cooperation with our laboratories, we make bacteriological surveys of our operations, and routinely use petri plates to make surveys of the incidence of mold spores in various areas throughout the plants. The use of hand sanitizing dip stations, and the sanitizing of equipment is a prime requisite for bacterial control, and these procedures have become an integral part of our program.

PEST CONTROL

We utilize a self-controlled program for pest control. Therefore, our sanitarians must be thoroughly

familiar with various types of cereal insects, their life cycles, habits, and other characteristics in order to understand the control measures that should be used to avoid infestation problems. Other species of insects that are of primary concern include ants, flies, and roaches. While we stress that 80% of the job of insect control is the cleanliness or housekeeping effort, there will always be the casual insect invader. Therefore, use of insecticides is necessary. The sanitarian must also be thoroughly familiar with the composition, application, precaution, and effectiveness of all company-approved insecticides.

A necessary part of our pest control program is the control of rodents. The sanitarian must be thoroughly familiar with the habits and characteristics of both rats and mice to guide him in establishing an effective control program. This program must include rodent-proofing the building, eliminating outside harborage or conditions conducive to rodents, as well as keeping traps set at all times in strategic areas.

Birds are also included in our pest control program. Such species as pigeons, sparrows, and starlings are most frequently encountered. As is true with insect and rodent control, sanitation is of prime importance in bird control. Sanitation must include their exclusion from food, roosting, resting, and nesting. Revolving lights and ultrasonic devices have not been very effective for bird control and our knowledge of chemical control is limited.

BISSC

Nearly everyone is familiar with the baking industry sanitation standards committee, commonly known as BISSC. This committee was founded near-

ly 20 years ago to meet the serious sanitation problems caused by uncleanable bakery equipment, inadequate consideration of sanitation requirements in the design of new equipment, and the use of unsuitable materials in bakery food processing units. Our company has been represented on, and has taken an active part in, the functions of this committee from the very beginning. It is company policy, in the purchase of new equipment, to insist on BISSC certification whenever possible. This also holds true in the manufacture and/or alteration of equipment in our plants. The sanitarian naturally is consulted in these matters.

AGENCIES AND DEPOTS

While I have been discussing our program primarily as it is carried out at the plant level, we also have to be concerned about our "agencies" or distribution depots. The agencies follow our same basic sanitation program under the direction of the Agency Manager. Semi-annual sanitation inspections of the agencies are conducted by the Sanitarian, Engineer and/or Manager from the plant responsible for the agency.

As I stated at the beginning of this paper, responsibility for sanitation in the plant is that of the *manager*. It is frequently stated in our company that, "a plant is as clean as a manager wants it to be." While I feel that we have an excellent basic sanitation program, it is necessary to have the desire of each manager, the department heads, and every employee to make the program work with maximum efficiency to produce the highest quality products in kitchen clean surroundings at a profit.