

# **Sanitation Standard Operating Procedures**

## **(Lox)**

(Ken Hilderbrand, Oregon State University)

---

Date: February 22, 1996

To: Employees of Brand Lox Company

From: Kenneth S. Hilderbrand Jr., President

Subject: Sanitation Standard Operating Procedure

Effective immediately, Brand Lox Company is adopting a Sanitation Standard Operating Procedure (SSOP) as described in the Food and Drug Administration's new regulation Procedures for the Safe and Sanitary Processing and Importing of Fish and Fishery Products.

A copy of this SSOP is available in the office, and employees who need a copy will be provided one.

The SSOP does not change the way we will practice sanitation in our plant; it simply documents what we've been doing successfully for some time. So although the FDA regulations do not go into effect until December 18, 1997, the SSOP will be a useful tool for us and there is no reason to wait to adopt it. The SSOP itself is not required by the law, but monitoring sanitation procedures and keeping records is. The SSOP will make it easier to meet these requirements.

---

**BRAND LOX COMPANY**

**SANITATION STANDARD OPERATING PROCEDURE**

<b>EMPLOYEES MUST WASH HANDS BEFORE RETURNING TO WORK</b>	<b>THIS IS A FINISHED PRODUCT AREA ----- NO RAW PRODUCTS PASSAGEWAY</b>	<b>WASH HANDS BEFORE RETURNING TO WORK</b>
<b>LEAVE SMOCKS AND GLOVES IN PRODUCTION ROOM</b>	<b>WEAR CUT-PROOF GLOVE WHEN TRIMMING  DID YOU OPEN/CLOSE THE STRIP DOOR</b>	<b>CORDS ONLY</b>

---

## **BRAND LOX**

### **SANITATION STANDARD OPERATING PROCEDURE**

drafted 2/8/96 revised 2/22/96

#### **FDA Conformance Requirement:**

Sec. 123.11--Sanitation control procedures. (a) Sanitation SOP. Each processor should have and implement a written sanitation standard operating procedure (herein referred to as SSOP) or similar document that is specific to each location where fish and fishery products are produced. The SSOP should specify how the processor will meet those sanitation conditions and practices that are to be monitored in accordance with paragraph (b) of this section. (b) Sanitation monitoring. Each processor shall monitor the conditions and practices during processing with sufficient frequency to ensure, at a minimum, conformance with those conditions and practices specified in part 110 of this chapter that are both appropriate to the plant and the food being processed and relate to the following:

#### **Company Policy/Procedures:**

Although not mandated by the regulations, Brand has written and adopted this Sanitation Standard Operating Procedure (SSOP) believing that it will be a useful document and that it will assist the

company in producing safe products. It will be a "living" document to be revised as needed, based on new technology or production procedures.

Brand's sanitation program will conform, at a minimum with the conditions and practices specified in part 110 (sanitation) of the regulations. Part 110 is attached as Appendix III of this SSOP.

## **SAFE WATER--SSOP item 1**

### **FDA Conformance Requirement:**

(1) Safety of the water that comes into contact with food or food contact surfaces, or is used in the manufacture of ice; Existing Conditions:

Brand Lox processing water comes from the Southbeach Utility Board (SUB), a reliable municipal system serving Southbeach, Oregon, meeting all state and federal standards, and complies with the Oregon Drinking Quality Act (ORS 448.119 to 448.285). If a treatment failure occurs, we will be notified by public media, but such a failure is a very remote possibility. SUB has 30 wells spread over several power grids, so only a massive regional power failure could shut down the source of water. There is a 2- to 3-day supply of treated water in the reservoirs most of the time. During peak demand periods, there is a 1- day supply.

### **Company Policy/Procedures:**

In the event of water treatment failure, Brand will immediately stop production, determine when the failure occurred, embargo all product produced during the failure until the nature of the problem is known and products are tested for pathogens if necessary. Only wholesome product will be shipped. Monitoring:

(Semiannual testing) Twice each year, water samples will be submitted to a private testing laboratory for pathogen screening in case some local or in-plant water service line problem should develop. If a water purity problem is discovered, Brand management will stop production and determine the nature and

extent of the problem prior to restarting production or shipping products. Only wholesome product will be shipped.

### **Record Keeping:**

All records and test data pertaining to safety of water will be kept in Brand's SSOP files for 2 years.

## **CLEAN FOOD CONTACT SURFACES: SSOP item 2**

### **FDA Conformance Requirement:**

(2) Condition and cleanliness of food contact surfaces, including utensils, gloves, and outer garments;

### **Existing Conditions:**

Built in 1991, the Brand facility is a modern processing plant meeting all applicable state codes. It is located in a modern industrial park and is surrounded by paved parking. It complies with part 603-25-020 (General Standards) of Chapter 603, Division 25, Oregon Administrative Rules.

### **Company Policy/Procedures:**

Sanitation procedures at Brand will comply with part 603-25-150 (Food Processing Establishments) of Chapter 603, Division 25, Oregon Administrative Rules.

- Daily
  - All finished product workers are required to wear hair/beard nets, smock, and disposable gloves. Raw product workers also wear waterproof aprons.
  - Food contact surfaces, with the exception of smokehouses, carts, and racks, are cleaned twice each day--once at the midday break, and again at the finish of the shift.
  - Pick up and remove major solid wastes. Tear down slicers.

- Rinse all surfaces with cold water. Degrease and scrub all surfaces with degreaser. (See Appendix I, List of Approved Sanitizing Chemicals.)
- Rinse all surfaces with hot water (190 degrees F).
- Sanitize with Quaternary Ammonia. This food contact-approved sanitizer is squeegeed from surfaces prior to resuming production after the midday break. It is left on overnight at the end of shift cleaning.
- Floors are freed of solid waste, then rinsed twice each day with hot water (190 degrees F) and sprayed with Quaternary sanitizer.
- Utensils are cleaned twice each day, once at the midday break and again at the finish of the shift.
- Clean in deep sink with degreaser (and abrasive cleaner if necessary)
- Rinse in hot water (190 degrees F) Soak in Quaternary sanitizer
- Rinse in hot water (190 degrees F) prior to use
- Outer garments (smocks) for finished-product workers are laundered in-house as needed. In some workspaces, this will be twice per week. Disposable gloves are replaced as needed, normally at each lunch break and at the end of the shift. Raw-product workers wash and sanitize their aprons and gloves twice each day, at midday break and at the end of the shift.
- Weekly
  - Smokehouse and accessory dollies and racks are cleaned on the first day following the end of weekly production (normally a Saturday).
  - Smokehouses and accessories are sprayed with degreaser (see list)
  - Rinse with hot water (190 degrees F).
  - All food contact surfaces are rinsed with Sodium Hypochlorite (100 ppm).
- Bi-weekly
  - Smokehouses and accessories are heated to 200 degrees F for 30 minutes.
- Periodically

- At least once per year, the evaporators in the cooler are cleaned to prevent buildup of biofilms. Monitoring: A cleanup crew and supervisor are identified for daily sanitation. A special crew is employed for weekly (Saturday) cleanup and sanitizing contact surfaces. A post-sanitation cleanup inspection is performed by the supervisor after each cleanup period, and a form is checked off with the supervisor's initials (noting any problems or deviation from company policy) and the date, and is then given to the plant manager for signature and filing.
- Record Keeping: All sanitation inspection sheets and other records are kept in the company SSOP file for 2 years.

**Monitoring:**

A cleanup crew and supervisor are identified for daily sanitation. A special crew is employed for weekly (Saturday) cleanup and sanitizing contact surfaces. A post sanitation cleanup inspection is performed by the supervisor after each cleanup period and a form is checked off with the supervisors initials (noting any problems or deviation from company policy), dated, and given to the plant manager for signature and filing.

**Record Keeping:**

All sanitation inspection sheets and others records are kept in the company SSOP file for two years.

---

**PREVENT CROSS-CONTAMINATION - SSOP item 3**

**FDA Conformance Requirement:**

(3) Prevention of cross-contamination from insanitary objects to food, food packaging material, and other food contact surfaces, including utensils, gloves, and outer garments; and from raw product to cooked product;

### **Existing Conditions:**

The layout of Brand's processing facility does not lend itself to complete isolation of finished product from raw materials. The facility is, however, designed for ease in cleaning, sanitation, and traffic control.

### **Company Policy/Procedures:**

Brand uses an aggressive sanitation program to remove potentially harmful microorganisms from raw materials prior to their exposure to the plant in unprocessed form. As recommended by Dr. Mel Eklund, National Marine Fisheries Service Utilization Research Division (NMFS), frozen raw materials are thawed in chlorine and isolated in the thaw/fillet rooms until they are ready for brining. By preventing microorganisms from entering the plant environment, sanitation programs become an effective method of eliminating contamination of finished product from raw materials, thereby ensuring complete product safety.

Brand policy does not allow employees from raw-product processing areas to pass through finished-product areas on their way to toilets or lunch rooms. Appropriate signage is in place outside the entrance to finished product areas. Each process area is provided with hand washing and sanitizing facilities.

### **Monitoring:**

The success of Brand's sanitation program is monitored by periodic microbiological evaluation. Several times per year, swab samples from the skin of thawed and rinsed fish are screened for total aerobic plate count and *Listeria* species. If a *Listeria* test is ever positive, then species identification will be conducted. Finished products are also screened for total plate count. Numerous tests for the presence of *Listeria* in the finished product conducted prior to 1996 have all been negative.

### **Record Keeping:**

All microbiological test results will be kept on file for 2 years.

---

## **EMPLOYEE HYGIENE - SSOP item 4**

### **FDA Conformance Requirement:**

(4) Maintenance of hand washing, hand sanitizing, and toilet facilities;

### **Existing Conditions:**

Employee toilet facilities are located off the lunch room. Appropriate signage warns employees to wash hands before returning to work.

### **Company Policy/Procedures:**

Brand company policy is that all employees will wash and sanitize their hands with company-approved antiseptic hand cleaner. In addition, disposable gloves are required. Supervisors are instructed to enforce these policies.

### **Monitoring:**

Supervisors are instructed to enforce hand washing policies, but more important, employees are taught the importance of sanitation to their job.

### **Record Keeping:**

All records related to hand washing and toilet facilities are kept on file for 2 years.

---

## **ADULTERATION - SSOP item 5**

### **FDA Conformance Requirement:**

(5) Protection of food, food packaging material, and food contact surfaces from adulteration with lubricants, fuel, pesticides, cleaning compounds, sanitizing agents, condensate, and other chemical, physical, and biological contaminants;

## **Company Policy/Procedures:**

Bulk quantities of chemicals that are not food grade are stored separate from those that are food grade, and are accessed only by authorized employees. Properly labeled 5-gallon containers of food contact sanitizing chemicals are stored in processing areas at their point of use. Food-grade lubricants are stored outside processing areas and separated from non-food-grade lubricants. Only chemicals listed in Appendix I of this document may be purchased or used at Brand. Only authorized employees may handle these substances.

All packaging materials are stored in the shipping/receiving room and are not exposed to stored chemicals or lubricants.

## **Monitoring/Record Keeping:**

All records pertaining to purchase and use of chemicals will be kept on file for 2 years.

---

## **TOXIC COMPOUNDS - SSOP item 6**

### **FDA Conformance Requirement**

(6) Proper labeling, storage, and use of toxic compounds.

### **Existing Conditions:**

All bulk quantities of toxic and non-toxic compounds are properly labeled (an OSHA requirement), segregated by food/non-food contact category, and stored outside the process areas. They are accessible to authorized employees only. Bulk quantities of cleaning/sanitizing chemicals are kept in the smoker room with appropriate drip protection. Smaller day-use quantities are kept in the production room, the cooler, and the thaw/fillet room. Lubricants are separated by food/non-food categories and stored in the supply room. Ingredients (salt, sugar, etc.) are stored in a separate storage room off the smoking room.

**Company Policy/Procedures:**

Only authorized employees are allowed to handle or use toxic compounds.

**Monitoring/Record Keeping:**

Supervisors are required to be knowledgeable about chemicals used in Brand processes. All records pertaining to chemical use will be kept on file for 2 years.

---

**EMPLOYEE HEALTH - SSOP item 7****FDA Conformance Requirement:**

(7) Control of employee health conditions that could result in the microbiological contamination of food, food packaging materials, and food contact surfaces.

**Existing Conditions:**

Brand is a small company with a normal complement of 35 employees (45 maximum) and cannot justify the cost of a nurse.

**Company Policy/Procedures:**

Employees are instructed to report any health condition that might result in contamination of food or food-contact surfaces. Immediate supervisors are instructed to report suspected health problems to the Plant Manager, who then makes a case-by-case decision about the potential of food contamination. Employees who represent a risk are sent home or reassigned to non-food contact jobs if appropriate.

**Monitoring/Record Keeping:**

The Plant Manager is responsible for monitoring employee health. All appropriate records will be kept on file for 2 years.

---

### **FDA Conformance Requirement:**

(8) Exclusion of pests from the food plant.

### **Existing Conditions:**

Brand is located in a relatively vermin-free environment with few outside doors. Plastic curtains screen all processing areas, and bug-killing devices are located outside the entrance to these areas.

### **Company Policy/Procedures:**

Brand contracts with a pest management firm to treat the exterior plant areas once per month in warm weather and every other month in cool weather. They also inspect the interior of the plant and treat as necessary with appropriate chemicals.

### **Monitoring/Record Keeping:**

All supervisory personnel are required to report all pest management problems. Records of pest treatment procedures will be kept on file for 2 years. .

---

## **TIMELY ACTION**

### **FDA Conformance Requirement:**

The processor shall correct in a timely manner, those conditions and practices that are not met.

### **Company Policy:**

Brand policy is that this SSOP is to be followed and any deviations to be reported to the Plant Manager. The Plant Manager is instructed to correct, in a timely manner, any such deviations from the plan.

---

## **RECORD KEEPING**

### **FDA Conformance Requirement:**

(c) Sanitation control records. Each processor shall maintain sanitation control records that, at a minimum, document the monitoring and corrections prescribed by paragraph (b) of this section. These records are subject to the requirements of Sec. 123.9.

### **Company Policy:**

A special section of hard-copy files is reserved for all SSOP records, which will be kept for 2 years. The general and minimum requirements of Sec. 123.9 (which is part of this SSOP) will be followed.

---

## **HACCP PLAN**

### **FDA Conformance Requirement:**

(d) Relationship to HACCP plan. Sanitation controls may be included in the HACCP plan, required by Sec. 123.6(b). However, to the extent that they are monitored in accordance with paragraph (b) of this section, they need not be included in the HACCP plan, and vice versa.

### **Company Policy:**

Brand Lox Company chooses not to include sanitation controls as part of its HACCP plan, but instead intends to monitor sanitation in accordance with paragraph (b) of the regulations.

---

## **BRAND LOX COMPANY**

### **SANITATION CHECK LIST**

*Instructions: 1. Place initials by each item OKAYED by inspection/observation (meets SSOP standard)*

2. date and sign form
3. return form to Plant Manager
4. keep form on file for 2 years

	<b>Butcher Room</b>	<b>Finish Room</b>	<b>Operations</b>	<b>Ship/Receive</b>
<b>Daily - food contact surfaces, utensils, floors, toilets</b>				
Condition at startup				
Hand-wash facilities				
Midday cleanup				
End-of day-cleanup				
Employee hygiene				
Toilets				
<b>Weekly</b>				
Smokehouse cleaning				
Chlorine rinse				
<b>Bi-weekly</b>				
Smokehouse heating				
<b>Monthly or Bi-monthly</b>				
Pest management				
<b>Periodically</b>				
Cooler evaporators				
<b>Deviations from SSOP and corrective action:</b>				
<b>Reviewed by (Plant Manager):</b>				
<b>Date:</b>				

**Appendix I**

# Chemicals Approved for Use in Brand Lox Facilities

Revised 2/22/96

## **Sodium Hypochlorite Sanitizer**

Brand: All Pure Nugget Brand 5.25%

Usage: Weekly sanitation rinse 100 ppm  
Thaw tanks 30 ppm

## **Quaternary Ammonium Sanitizer**

Brand: Spartan Sani-T-10

Usage: Food contact surfaces, floors 200 ppm  
Disinfecting dip for scrubbers, sponges, utensils 400 ppm

## **Degreaser/detergent**

Brand: Spartan Inspector's Choice

Usage: Food contact surfaces, utensils 1:20 dilution

## **Smokehouse Cleaner**

Brand: Spartan SC-200

Usage: Smokehouse interior surfaces, racks, and screens 1:10 dilution

## **Hand Cleaner**

Brand: Spartan Antiseptic Hand Cleaner

Usage: Toilets and hand cleaning stations in all process areas

## **Lubricants**

Brand: Kasco Lubriccoat

Usage: Slicers

Brand: Lyondell Ideal FG HT2 grease (H1)

Brand: Bettcher Ins. Special Whizard grease (H1)

Usage: Slicers

Brand: Terand White Grease Lithium base

Usage: General purpose

---

## **Additional Appendices available from Ken Hilderbrand:**

APPENDIX III: CURRENT GOOD MANUFACTURING PRACTICE IN  
MANUFACTURING, PROCESSING, PACKING, OR HOLDING HUMAN  
FOOD, PART 110 - SANITATION

## APPENDIX IV: PROCEDURES FOR THE SAFE AND SANITARY PROCESSING AND IMPORTING OF FISH AND FISHERY PRODUCTS

## APPENDIX V: CROSS REFERENCES

**Note:** There may be some charges for postage & handling.

**[Return to Seafood NIC Home Page](#)**

**[Return to Oregon Sea Grant Home Page](#)**

---

### **Publication No. ORESU-I-97-003 copyright Oregon Sea Grant**

*This publication is funded by Oregon Sea Grant through NOAA, Office of Sea Grant and Extramural programs, U.S. Department of Commerce under grant no. NA36RG0451, project no. A\SGE-3. Oregon Sea Grant is based at, and receives additional support from, Oregon State University, a Land Grant, Sea Grant, and Space Grant institution funded in part by the Oregon Legislature.*

*Sea Grant combines basic research, education, and technology transfer to serve the public. This national network of universities works with others in the private and public sectors to meet the changing environmental, economic, and social needs of people in the coastal, ocean, and Great Lakes regions of the U.S.*