

WASHINGTON BEEF LLC
CONSENT AGREEMENT AND FINAL ORDER

ATTACHMENT A

SEP DESCRIPTION

**APPENDIX "A" to the Emergency Response Plan
Ammonia Release Notification System for Washington Beef LLC - Toppenish
July 24, 2008**

Washington Beef – Commitment to Safety, Purpose for the New Ammonia Release Notification System

Washington Beef is committed to the Safety and Welfare of its employees and the surrounding community. One component of the Process Safety Management Program is Emergency Response which includes notification of on-site employees and first responders should there be an ammonia release.

As such, we desire to enhance our current ammonia release notification methods by implementing an Ammonia Release Notification System separate and apart from the existing Fire Alarm System to notify employees and on-site first responders. Because we require our employees to respond differently with a Fire Alarm than we would for an Ammonia release, a distinctive notification system with a unique sound and strobe color to notify employees is needed.

The primary purpose of the Ammonia Release Notification System is to quickly and efficiently notify employees and first responders should an actual ammonia release occur and allow them to move to their designated Primary Meeting Locations for further instructions and actions.

Refrigeration Systems, Controls, Locations of Ammonia Level Sensors, Ranges and Calibration

Washington Beef has three distinct and separate ammonia refrigeration systems, not connected in any way: System P, System R, and System X. Each of these refrigeration systems is controlled by its own independent Refrigeration Computer Control System (RCCS). All refrigeration systems P, R, & X also have Ammonia Level Sensors (ALS) located in rooms that contain ammonia refrigeration equipment in them. Rooms with refrigeration equipment tied to a particular RCCS also have ALS's tied to that same RCCS. No rooms in the facility have refrigeration equipment, piping, or ALS's from more than one refrigeration system.

The ammonia level trigger setpoints for ALARM condition in parts per million (ppm) are as follows:

Engine Rooms – 175 ppm

All other rooms containing refrigeration equipment or piping – 25 ppm

The Ammonia Level Sensors already existing in the facility are of two models. The rooms that contain refrigeration equipment from System "P" and System "X" use Manning model EC-F2-NH3 Ammonia Level Sensors and the rooms that contain refrigeration equipment from System "R" use Greer, model AS-400 Ammonia Level Sensors.

The Manning EC-F2-NH3 ALS units have a sensitivity range from 0-1000 ppm. The Greer AS-400 ALS units have a sensitivity range from 100-1000 ppm for engine rooms units and 0-100 ppm for work room units.

Calibration of these all ALS units is conducted every 6 months per both manufacturer's calibration recommendations and is documented in the MP2 Computer Maintenance Management System. Calibration gases of zero air and a span gas of 1000 ppm are used for the Manning ALS units and Greer Units uses calibration gases of 1000 ppm for engine room units and 100ppm for work room units. Defective units which cannot be re-calibrated will be replaced.

Functionality of the Ammonia Release Notification System

(See the attached Ammonia Release Notification System - Flow Schematic in conjunction with this Section.)

When an ammonia level exceeds the alarm trigger setpoint in any area, the ALS's in that area communicate that level condition to the RCCS which, in turn, activates an initial reactor alarm in the maintenance shop located that area. The initial reactor alarm devices (Federal Signal) will be located as follows:

System P – Processing Maintenance Shop

System X – Fab Maintenance Shop

System R – VAP Maintenance Shop

Upon receiving an initial alarm in the shop area, maintenance personnel will immediately determine which room(s) the alarm is triggered from by looking at the RCCS monitor for that Refrigeration System. Verification of the alarm condition will then immediately commence. The verification step is necessary because when alarms have occurred in the past, they have been "false" alarms caused by other maintenance and cleaning chemicals that have simply volatilized and set the alarms off.

There are several chemical compounds that have been used in the facility and known to have caused "false" alarm conditions. Some of these are paints, cleaning chemicals, glues, and polyester flooring materials.

Should the alarm condition be verified to have been caused by an ammonia release and not other maintenance and cleaning chemicals, the person verifying the ammonia release condition will immediately communicate via Radio, Channel 4 to activate the Ammonia Release Notification System (ARNS). Once activated the alarm system will sound plant wide and employees will begin moving to their Primary or Secondary Meeting Locations as designated in the Emergency Response Plan based on which direction the windsock is blowing.

There will be three Activation Stations for activating the plant wide ARNS located in the same location as the initial reactor alarms in the Maintenance Shops. An indicator panel (Panelview) located at each Activation Station will also indicate which activation station has been pulled allowing any other area to know which area has experienced the ammonia release.

Components of the Ammonia Release Notification System

The major components of the proposed Ammonia Release Notification System consists of:

10 Qty - 1763-L16BWA Micrologix 1100 – PLC

10 Qty – 1609-U500NS Allen-Bradley – Uninterruptible Power Supply - UPS

3 Qty - 2711C-T6C Allen-Bradley Panelview

81 Qty - Federal Signal LP7-18-30A 82-100dB – Sounder/Strobe (Amber)

VLAN – Existing System already in place

Components Connections

Programmable Logic Controllers (PLC's) will be located strategically throughout the facility in proximity to 120 volt electrical power sources. Each PLC will be provided a 120 volt power supply from a dedicated Uninterruptible Power Supply (UPS) which in turn will receive power from a dedicated 120 volt, 20 amp circuit breaker marked "amber" in color. Should any PLC experience a loss of primary electrical power, the UPS will provide power up to 1 hour. Should any PLC experience a loss of communication for whatever reason, all remaining PLC's connected to Panelviews will initiate a System Trouble alarm at those Panelviews and alert maintenance that there is a problem with the system. Upon repair of the problem, it can then be reset.

All PLC's will be connected to each other and to a dedicated Virtual Local Area Network (VLAN) via an Ethernet cable system that will allow PLC's to communicate with each other. The PLC's provide 24 volt digital outputs which will be connected to the Sounder / Strobes located in rooms in that vicinity using a two wire cable with a yellow jacket to indicate that it is a part of the Ammonia Release Notification System. Three of the PLC's will also have 24 volt inputs using a two wire cable with a yellow jacket from the three Activation Stations and 120 outputs to Panelviews located at the Activation Stations.

Locations of the Sounder/Strobe Alarms, Initial Reactor Alarms, and Activation Stations

See the attached schematic (Washington Beef Drawing 1 of 1) for locations of the Sounder/Strobe Alarms, Initial Reactor Alarms, and Activation Stations.

Testing of the Ammonia Release Notification System

Testing will be conducted on the Ammonia Release Notification System every 6 months to determine that each individual component functions correctly. The test will consist of independently activating the ARNS at each of the three Activation Stations and observing that all alarms are operating correctly. Additionally, electrical power will be removed from the system and the Uninterruptible Power Supply will be tested to ensure ARNS operation if a power outage were to occur. Any defective component on the ARNS will be replaced to keep the system operational. Testing of the ARNS, as well as any defective components found during the test, will be documented in the MP2 Computer Maintenance Management System.

Implementation Schedule

Should this SEP be acceptable, the implementation schedule will be as follows after receiving final written SEP approval from EPA:

Engineering and Design - **Completed**

Procurement of Equipment – 60 days

System Installation – 4 months after completion of Procurement

Testing – 1 week after completion of the Installation

Certification and System Start-up – 1 day after completion of Testing

System Testing – Scheduled Quarterly after Start-up

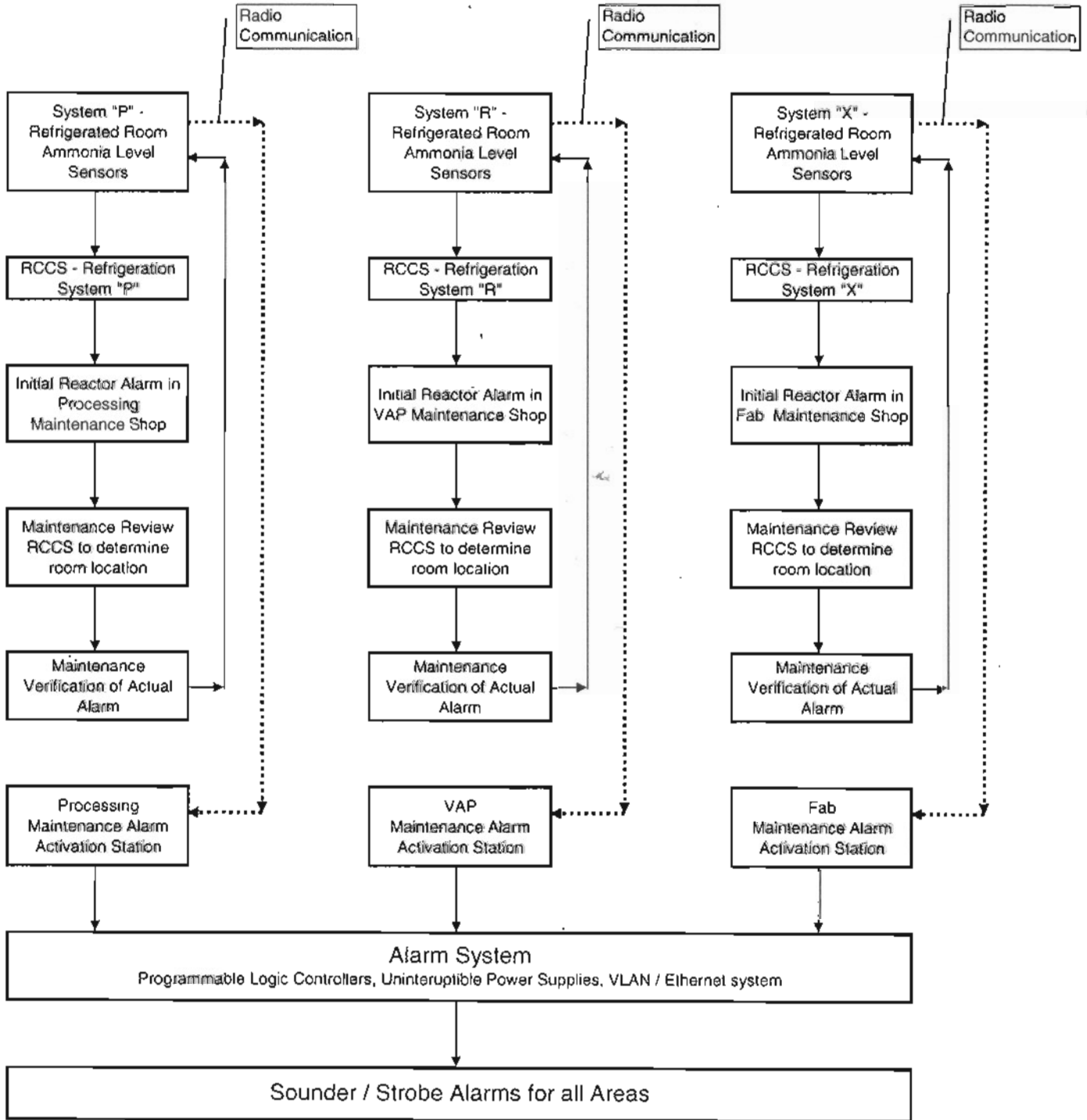
Training on Responding to the Ammonia Release Notification System, Safety Equipment

See Memorandum from Barb Shimek dated 7/23/08.

The Ammonia Release Notification System is fundamentally a Safety System in and of itself. There is no additional Safety Equipment needed or required with this project.

Washington Beef, LLC - Ammonia Release Notification System - Flow Schematic

July 23, 2008





Memorandum

To: Brad McDowell

cc: Dave Stiner
Rick Stott

From: Barb Shimek, HR Information Specialist

Date: July 23, 2008

Re: Ammonia Alarm System Training

This is to summarize a proposal for proceeding with training related to an updated ammonia alarm system.

Manufacturer's recommended training will be conducted for two refrigeration Maintenance Technicians and (one) salaried PLC Technician. Additionally, all maintenance staff will be introduced to the new system and familiarized with the operation and fundamentals of the system.

A Process Safety Management (PSM) sub-committee will be formed, consisting of Safety Coordinator, Director of Facilities, HR Information Specialist and two hourly refrigeration technicians, to develop the necessary procedural modifications in preparation for delivery of the training to all personnel.

Reference to the new emergency ammonia alarm system procedures will be incorporated into New Employee Orientation materials and new employees will be educated about the updated emergency evacuation procedures during New Employee Orientation meetings effective immediately with the installation of the system. Additionally, updates to written procedures must be made to all company programs i.e. Emergency Action Plan (EAP), Accident Prevention Plan (APP), Process Safety Management Program (PSM), and Risk

Management Program (RMP). Each of five 3-ring binders that store these programs must be updated with modified procedures at all appointed locations including Safety Coordinator's Office (primary location), Processing Maintenance Shop, Fabrication Maintenance Shop, VAP Maintenance Shop, HR Information Specialist's Office, and Director of Facilities Office.

Meetings will be scheduled to disseminate information to all operations managers and supervisors (salaried staff that totals approximately 40 staff members) to prepare for departmental meetings to advise all hourly employees of the changes to the ammonia alarm system. Security personnel will be trained regarding their role in evacuation procedures with emphasis placed upon actions to be taken and notification procedures in the event of an after-hours alarm activation.

The setup, training, and pre-implementation sessions will incorporate over 50 senior personnel throughout the plant. The cost will be approximately;

$$50 \times \$25.00 \text{ per hour} \times \frac{1}{2} \text{ hour} = \$625$$

Upon completion of the alarm system installation, the final phase of training will be the execution of a plant-wide evacuation drill. Care will be taken to schedule the evacuation drill at a time that will minimize impact to operations, however a plant-wide drill necessitates the total stoppage of all processes at our facility. Advance notification will be provided to appropriate outside agencies (local authorities, emergency personnel, etc.), and Washington Beef's Haz-Mat team members will initiate preliminary response action. Employees will be released to return to their workstations and operations will be resumed after all appointed team leaders submit a verbal accounting for each member of their respective work areas. While our experience has proven that a plant-wide drill involving over 800 employees on-site can be extremely challenging, we have found that with pre-planning, a successful drill should be concluded and full operations resumed after approximately one half hour of down time. Though costly to production, this is a valuable training tool and the most effective method of demonstrating that employees truly understand how to respond in the event of an hazardous substance release emergency.

Cost estimate calculations for the drill alone are as follows:

750 employees (incl. hourly admin) @ \$14.75/hr (fringe incl.)
30 min DT for drill = \$5531.00 labor cost

Lost production calculation:

$\frac{1}{2}$ hr drill = 90 head lost production

\$45/hd fixed cost contribution = \$4050

Estimated \$30.00 lost opportunity margin = \$2700

Additional laundry cost = \$250

Total estimated cost for a 30 minute training drill = \$12,531

Ammonia Alarm System Training

