



Western Region Alliance



Funded by The Beef Checkoff



Beef Quality

A Guide to Writing
Standard
Operating
Procedures

Assurance



From the
Western Region Alliance on Beef Quality Assurance
2008

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INTRODUCTION

What Are SOPs

Standard operating procedures or SOP's are written guidelines that specifically describe how to complete various tasks on the ranch. They make it possible for different people (employees or family members) to always complete the same tasks consistently and safely. In addition, they make for better future decision-making or investigation into how to improve the processes on the ranch. SOPs should be developed based on fundamental principles of good management.

You may "just know" what needs to be done and the processes needed to achieve success. For example you've probably processed cattle many times before and know the idiosyncrasies of your squeeze chute. But not everyone else has this wealth of knowledge. SOPs will provide that bridge of information and serves as a systematic way to make sure that all tasks are carried out consistently.

WHY SOPs?

Here are 15 Reasons Why SOPs are needed on a ranch operation:

1. A guide for relief workers filling in for vacations, illness or turnover.
2. A reference for employee training, cross-training and retraining.
3. Less chaos and confusion when employees leave.
4. Consistency. A job is performed correctly every time.
5. Approved procedures that reduce the risk of job failures and interruptions.
6. A basis for effective performance evaluation.
7. Improved acceptance of practices because people support what they help create.
8. A means for everyone to think through the whole process of a task.
9. A statement of who does what, where, when, why and how.
10. Legal protection since a detailed process is documented in print.
11. Reference document in accident investigations.
12. An opportunity to build unity around attainable standards and goals with procedures to achieve them.
13. An evaluation of labor efficiency and procedural correctness.
14. A checklist for co-workers to observe performance and reinforce it if it's correct.
15. An aid in writing job descriptions and identifying skill requirements (ProDairy 2008).



SOPs DOCUMENT QUALITY ASSURANCE

Even if you are BQA-certified and have excellent ranch management practices for Quality Assurance in place, how do you demonstrate that to potential buyers? How do you market cattle in a way that demonstrates that they have been managed using BQA principles? The answer is RECORD-KEEPING, DOCUMENTATION and SOPs for the procedures done on the ranch.

BASICS OF WRITING SOPs

An SOP can be a simple set of steps, a tiered set of steps, or a flowchart. The basic elements include an SOP Title, Person Responsible for the SOP, and Date or Revision Date. You should include the list of tools, materials or equipment needed for the procedure and a list of safety precautions for hazardous procedures. The instructions in the process should be simple, short statements and be written clearly and concisely with little room for interpretation. Most often, involving those who are required to comply with the SOP in the SOP development process will improve compliance and may help define the procedure more efficiently.

As you think about which SOP's you should write first, consider starting with tasks that have safety concerns. You should also address other important tasks that can have the greatest positive impact on your employees and your business — such as when cattle are handled.

SOPs AND TRAINING

To attain compliance with what you want accomplished, you need to train those doing the work. Do not assume that everyone can read and understand written SOPs. They should be used as part of the training practice and not replace training. Workers also want to understand why the procedures must be performed correctly. The best steps in training are:

1. Discuss WHAT the procedures are and WHY they are important.
2. SHOW HOW to DO the procedures.
3. Have the trainees DO the procedure and get FEEDBACK.
4. Have the trainees DO the procedure and DESCRIBE WHAT they are doing (SAY AS THEY DO).

PROCEDURES FOR WHICH YOU MIGHT NEED SOPs AND PROTOCOLS

Tagging	Branding
Castration	Dehorning
Vaccination	Treatments
Feeding	Implanting
Breeding	Transporting
Restraint	Moving & Handling
	Calving Management

EXAMPLE SOP

A good example of where we might need SOPs is in processing calves. There are many procedures and steps to processing calves efficiently and effectively which means that there are many places where errors could occur.

Processing calves might involve:

Restraint	Tagging
Branding	Dehorning
Castrating	Vaccination

You might need an SOP for each of these major procedures. Let's use **Vaccination** as an example. If our goal is to vaccinate every calf effectively (so that they can respond to the vaccine with antibody production) with clostridials and an 8-way vaccine, we can foresee where we might run into problems and have instructions that will minimize error. First, the calves need to be processed in a way that minimizes stress so that their stress response does not interfere with their antibody response to the vaccine. The calves must also be presented to the crew in good condition (good plane of nutrition) so that they can best respond to the vaccine. If those two things are taken care of, you'll need to have the following on your SOP (see example SOP development worksheets):

Where the work will be done?

- chuteside or on calf table

Who will be doing the procedure?

- Lefty with assistance from Dusty

A list of equipment or supplies:

- adequate supply of needles for number of calves and supply of vaccines
- syringes or clean vaccination gun with back-up equipment and adequate amount of vaccine
- cooler and ice packs
- paint stick for marking "done" or herd health forms on which to record
- sharps container for used needles
- garbage container for vaccine bottles and boxes

Personal protective & safety equipment needed

- gloves, boots, hat

End result

- properly handled vaccine given as per label (dose, site) to each calf

Skills or training or certification needed

- review "Top 10 Reasons Vaccines Fail"
- review vaccine labels
- training on how to vaccinate

Steps in the procedure

- obtain vaccine from refrigerator and place in cooler with ice packs; keep cool during entire processing time
- follow label guidelines for vaccine handling
- set up equipment table at chuteside
- load syringe / gun
- give label dose in neck in labeled manner (subcutaneous SubQ or intramuscular IM)
 - for SubQ -- tent skin to make sure needle is under the skin
- mark calf with pink paint stick...or check off on list of calves, mark Tag number on record sheet



Although this seems like an awful lot of work, just going through the process of developing the SOP with the people who will be doing the work will help streamline the work and get buy-in to the way you want the work done.

MAKE THEM VISIBLE

Your completed SOPs should not sit on a shelf. A one-page SOP could be laminated and posted where the procedures take place. A 3X5 index card could be tucked into a pocket for quick reference.

SOPs HELP YOU ENSURE CONSISTENT QUALITY ASSURANCE PROCESSES.

SOP Development Worksheet (Cornell ProDairy)

SOP Name:

SOP Number:

Written by:

Date Written:

Date Implemented:

Date Last Revised:

Task Description

Location work is done:	Number of people required:
	Skill level:

Equipment & supplies required:

○

Personal protective & safety equipment required:

○

Objective, finished product or result expected:

Scope of this SOP:

Operations covered:	Workers covered:	Locations covered:
	Designated & trained workers: Names _____	

Specific Skills, Training, Certifications, or Licenses Required:

○

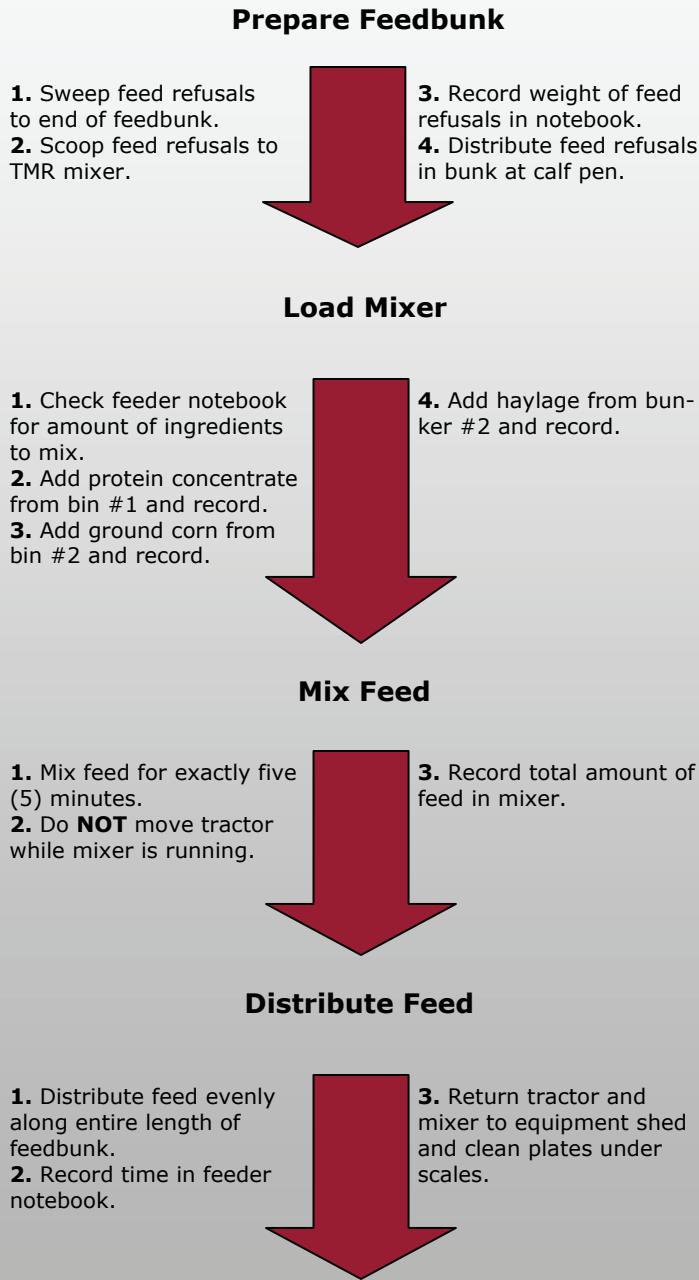
Protocols (Steps and procedures involved in this task or process. Use as many pages as necessary.)

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Figure 1. Sample “Graphic” SOP Format
BigSteer Feedlot, Feeding the Cattle Effective Date: November 2, 2008



(Adapted from Stup R, Penn State)

Squeeze Chute Safety Standard Operating Procedures

SOP number 1

Written by The Processing Team

Date effective 7/1/2008

Last modified 6/15/2008

Describes the safety protocol for the hydraulic squeeze chute on the LazyX Ranch

Location: Covered cattle working area.

of employees: 2

Skill level: Only employees trained on squeeze-chute safety may operate the chute. They may require assistance from other. The following employees are qualified: Dusty, Lefty, Seamus.

Equipment and supplies: Chute, movable panels, toolbox, power cord.

Result expected:

- Work cattle through chute quickly, effectively, safely
- Prevent injuries to people and cattle: contusions, cuts, abrasions, and broken bones
- Identify chute malfunctions before using

Protocols:

- Prior to using the chute, establish a communication system to safely coordinate employee actions for loading and unloading livestock into the chute with employee operation of chute hydraulics and mechanics.
- Prior to use, inspect the hydraulic hoses and fittings for defects or leaks and assure they are securely attached at connection points. Examine and test levers, latches, and moveable chute parts to assure they are not damaged and are functioning properly. Tighten loose bolts and nuts.
- If the chute fails the pre-use inspection, notify your supervisor and remove the chute from service by attaching a red tag that states “DO NOT USE.”
- Do not wear loose clothing or jewelry in the vicinity of the squeeze chute. Tie back long hair or wear under cap or hat.
- As necessary, wear boots, gloves, long pants, and eye and head protection when using the chute.
- Keep the work area clean and free of trip hazards.
- Avoid spooking livestock during handling operations.
- Be alert and aware of potential sudden changes in conditions when handling livestock.
- Keep feet, arms, hands, and fingers clear of gates and other moving hydraulic squeeze chute parts

(Adapted from UCANR, University of California)

APPENDIX A

Examples of Potential Monitors for SOP compliance

One way to check on compliance with your protocols is to develop a way to monitor the processes and end results. Below are just a few examples of monitors you could use.

For Processing Cattle:

- 1.** Needle use -- Number of needles used / Number of head processed = 1 needle per 10 head or less?
- 2.** Proper injection site -- mark injection site with paint stick.
- 3.** Proper dose of vaccine — number of head and total cc's required.



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