

Measured Self Inventory (MSI) Program for Licensed Grain Dealers

Michigan Department of Agriculture & Rural Development (MDARD) - October 2012

Goals

To provide an industry-wide gain in regulatory efficiency with benefits for both dealers and their regulators. For regulators, measuring dealer grain stocks as part of a routine audit is very expensive, consuming at least half of each auditor's on-site time each year. With an MSI program in place instead, MDARD staff can audit and spot-check the dealer's MSI record just as is done in many other industries. For dealers, getting an MSI up and running is a 'best management practice'. The traditional MDARD objective grain measurement does have value to the dealer but, of much greater value will be a regular MSI program supported by MDARD and ExamNet. With MSI dealers can quickly identify trends in grain quantity and quality. MSI is useful for grain quality management, reconciling inter-company transfers, identifying grain theft and satisfying lenders.

MSI requires use of USDA's longstanding standards as presented in the USDA Warehouse Examiners Handbook WE-3. MDARD has used ExamHand software which embodies the WE-3 handbook since 1997. All licensees will receive ExamNet software and training at no cost which will assist them in transitioning to MSI. The software is PC/Server based, user-friendly, and comprehensive. There are 3 basic areas where training is required: 1) How to measure grain? 2) How to enter those measurements into ExamNet? What do if measured inventory doesn't match book stock? Those licensees that can demonstrate another measured inventory method that is equivalent to USDA's WE-3 standard will be allowed.

MSI Software Components

ExamNet.

This Windows-based software application will be distributed to each licensed dealer soon. ExamNet provides a protocol based on 25 years of grain measuring software experience with grain regulators in 13 states. With ExamNet, dealer staff will get up to speed quickly. All bin capacity data is pre-loaded. Most commonly, only three things to know about each bin: type of grain in it, measured air on the sidewall and identify the grain lay ('cone up', 'high side' etc.). It should be noted that and MSI with ExamNet *does not require bin entry*. There is always at least one method where measurements can be taken from outside the bin.

ExamHand e-Zam.

For 15 years, MDARD auditors have performed their work with ExamHand software. Now MDARD is leveraging years of audit data and know-how because ExamHand eZam is equipped to electronically amend bins and audit data from ExamNet. Thus, instead of MDARD auditors measuring all the bins, they will instead measure a couple of bins at random and audit the dealer's ExamNet data. In addition, the new eZam product provides a completely paperless audit environment and work product with digital signatures.

Timeline

November 1, 2012

Begin visiting and installing "Early-Adopter" licensees. These are companies who volunteer to be first. They will receive on-site install and grain measure training as resources are available. These are companies who believe self-inventory is a "best management practice" and wish to help work and participate in any procedural issues that may arise. It is estimated between 15-30% of licensees want to be early adopters. Expectation: That early adopters install, enter measurements, and post/clear 2 months out of the 3.

January 16, 2013

MABA Winter meeting MDARD and ExamNet representatives will be on the trade show floor and on the agenda to inform about the MSI program.

February 1, 2013

Begin install and training all licensees. MDARD will be seeking additional venues to provide licensees training. During this phase "accuracy" takes a backseat to "complete and regular". Many early users become nervous when measurements are greater than 5% from book and are tempted keep measuring until it agrees.

July 1, 2014

From this point forward it is expected by MDARD that licensees are completing the ExamNet record monthly. From this point forward the licensee will be held accountable that MSI records are:

- 1) Complete. When a measured inventory is posted-- that the inventory is complete, no missing bins.
- 2) Regular. Measuring must be done consistently every month.
- 3) Tested for Accuracy. MDARD personnel will follow or re-measure bins at random to test the ability of the licensee to measure.
- 4) Discrepancy. If a discrepancy between Book Stock and Measured Inventory persists over several months an exception may be noted.

Policy Options & Recommendations

- 1) "Complete and accurate daily position report" under section 15.1 of PA141 of 1939. The purpose of MSI is to vet the DPR Inventory which is already being reported. MSI is not part of the monthly reporting process. It is a record that is required to be completed and available for inspection.
- 2) Monthly Measure Up. Measuring inventory monthly provides stronger inventory data than an annual audit because it shows trends in measured inventory over the entire storage season.
- 3) Wildcard Month. Spring and Fall are both busy seasons in production agriculture. Each audit year, it is allowable to "skip" one measurement for any reason. This is intended to provide busy employees an option during the height of Fall harvest or the Spring busy season.
- 4) Compare. Measured Inventory is normally found to be within 5% of DPR Inventory in an MSI situation just as it is with an audit measurement. If discrepancy is more than this, it most often indicates a need for more training on measurement techniques.
- 5) Separation of Duties. An effective internal control is established when two or more employees collaborate to measure inventory. Often operations staff will perform the actual measurements and report their findings on the "Bin Worksheet". Office staff often complete the MSI on ExamNet using these worksheets as input as they are completing the Measured Inventory Report.
- 6) Signatures. It is recommended that both the Bin Worksheet and Measured Inventory Report be certified by those who complete them.

Measured Self Inventory (MSI) Program Benefits

Benefits to the industry

- 1) Accuracy of Book Stocks. Monthly measure-up helps catch discrepancies at any early stage so they can be investigated and dealt with.
- 2) Grain Quality Monitoring. A monthly visual and olfactory inspection of each bin is extremely valuable in catching grain quality problems.
- 3) >Reduced Exposure to Safety Hazards. It is increasingly difficult for MDARD staff, who arrive once a year at best, to be sufficiently trained and briefed to safely enter all areas that store grain. Company operations staff are very familiar with the facility and highly trained.
- 4) Inter-Company Transfers. Location DPRs are very valuable for licensees with multiple facilities. However, the movement of grain between these facilities is sometimes not as well documented as they could be. MSI data by location is invaluable in reconciling and determining adjustments DPRs.
- 5) Grain Theft. MSI provides important and timely data for early discovery of systematic grain theft.
- 6) Business Partners. The Measured Inventory Report and Insurance Value Report provide interested parties valuable information that can strengthen business relationships (lenders, insurance and bonding companies, government agencies).

Benefits to MDARD

- 1) Allows Financial Emphasis. It is estimated up to 50% of MDARD auditor on-site hours can be redirected from measuring grain to focus instead upon the licensee's 'ability to pay'. This includes the calculation of solvency by bringing all market transactions to market at current prices.
- 2) Safety. The traditional practice of a full measured inventory is simply not sustainable in today's regulatory environment. Providing training applicable to all parts of all Michigan facilities as well as proper knowledge of each aspect of the facility is a large burden to auditors.
- 3) Staff Retention. Increasingly, high quality grain warehouse audit staff has become difficult to recruit and retain. Significantly reduced grain measuring hours is one way to potentially retain experienced audit staff.

About Exam Net Deployment

ExamNet is the licensee's application. This is not a web-application nor is it "cloud computing". MDARD has purchased a license for ExamNet for all active grain licensees in Michigan. ExamNet's data is stored on the licensee's computers and nowhere else. The licensee is responsible to backup and maintain their ExamNet data just like any other important operations data. MDARD/ExamNet have NO ACCESS to this information unless you send us this information (in the form of a "project" file) either as part of an audit or as part of a reporting requirement.

ExamNet software is an integrated executable code and small database that runs as a desktop application under Windows XP or Windows 7. In addition, it runs on a file server or in a Terminal Server or Citrix environment as well. ExamNet is very flexible in how it is deployed.

ExamNet has a simple PC installer so any proficient PC user can install their own licensed copy of the ExamNet. ExamNet has on-line help as well as an extensive PDF User Guide (attached). If we happen to be on-site with the licensee during installation, MDARD and ExamNet staff persons sometimes I become involved-- even sitting and operating their computer (i.e. "please do it for me"). However, it is our policy (MDARD/ExamNet) to not operate any Server. Only the licensee's IT staff or vendor can install ExamNet on a server with consultation from MDARD/ExamNet if necessary.

INSTALL: Steps to Install ExamNet.

1. User downloads from www.examhand.com the full install version of ExamNet (there will be a special web link for Michigan Department of Agriculture licensees). Also, MDARD personnel will have the installer readily available.
2. Any proficient PC user can self-install the download from examhand.com. However, at times it might be necessary to provide assistance over the phone or (in rare cases; on-site)
3. Upon initial installation, the ExamNet will not contain the licensee's bins. The licensee must log on to ExamNet and perform a "File" then "Open Project" using the MDARD-generated Project file to populate the user's ExamNet with their bins (see MDARD auditors below).
4. ExamNet is now ready to accept bin measurements for the Read Date shown.

POPULATE: MDARD Auditors:

1. On eZam, "Open Project" on the last subsequent or amendment audit.
2. Change the "Audit Date" on the control screen to next Read Date (note: consult with licensee on this if possible).
3. Go to "File" then "ExamNet" then "Save to ExamNet". The resulting file is used in Step #3 of "Steps to Install ExamNet" above.