

Holsum Dairy Green Tier Report of Functional Equivalency, October 2006

Wis. Stats. 299.83 (1)(dg) defines a functional equivalent environmental management system as one that includes all of the 12 elements listed in the statute, as well as any other that the department determines are essential elements of the ISO 14001 standard. The following is an explanation of how Holsum Dairy's Environmental Management System conforms to each of the 12 elements listed in the statute.

1- Adoption of an environmental policy that includes a commitment to compliance with environmental requirements, pollution prevention, and continual improvement in environmental performance.

- We've built an environmental ethic into our farming activities, developed an attitude of environmental awareness within Holsum Dairy and we actively seek ways of improving environmental performance.
- Examples:
 - HD's Environmental Policy is provided to all employees on their first day of work.
 - The Environmental Policy is provided to visitors at open houses and is available on WDNR's Green Tier web site.

Environmental goals which are consistent with the environmental commitment statement are developed from HD's annual assessment of the aspects and impacts.

Reference documents attached: Holsum EMS Policy Master, and the Spanish version, manejo del sistema del medio ambiente Master

2- An analysis of the environmental aspects and impacts of an entity's activities

Holsum Irish Dairy divided its enterprise into nine functional divisions:

1. Milking Center
2. Manure Storage, transfer, application
3. Feed Center
4. Maternity and Treatment Area
5. Adult Cow Freestall Barns
6. Grounds
7. Offices, Meeting Rooms, Employee Break Room
8. Shop - Generator - Separator Area
9. Emergency Situations

Within each division, where we have direct control, we scored impacts based on thirteen potential factors:

1. Aesthetics	2. Air Quality
3. Energy	4. Light Pollution

5. Noise	6. Pests
7. Recycling	8. Safety
9. Traffic	10. Waste, Hazardous and Universal
11. Waste, Solid	12. Water, Ground
13. Water, Surface	

Holsum Dairy (HD) has developed an Environmental Aspect and Impact Procedure that details how HD identifies the environmental aspects of its activities, decisions, and operations which can impact the environment. HD rates and ranks these impacts, and then determines significance in order to prioritize these aspects for consideration in goal setting, resource allocation, and focus. This process is conducted annually in January, February, or March, with any emerging issues incorporated as they arise.

Our first year analysis produced these items (A=Aspect, G=Goal, S=Score):

- 1 A-Hoof health baths, G-minimize copper sulfate applied to land, S= 65
- 2 A-Storing haylage and corn silage, G-reduce unpleasant odors, S=47
- 3 A-spreading manure, G-reduce tracking on road, S=48
- 4 A-Machinery operation G-Prevent refueling spills, S=48
- 5 A-Manure digester, G-eliminate use of fossil fuels to run generator engine, S=53
- 6 A-Store fuel on site, G-prevent/contain spills, S=63
- 7 A-Produce Grade A milk, G-Prevent/contain leaks of machine sanitizers, S=52
- 8 A-Livestock sales G-avoid quarantine due to foreign pest introduction, S=89
- 9 A-Dairy farm G-minimize fire/explosion damage to people, animals, facility, S=99
- 10 A-Machinery and cows G-prepare for employee accident/injury, S=76
- 11 A-Milking cows, 3 shifts, G-avoid employee injury from weather events, S=57
- 12 A-Cool break rooms, offices, G-improve air conditioners' efficiency, S-14
- 13 A-haul milk to plant G-reduce noise for neighbors' sleep times, S-45

Referenced Documents: E 4.3.1 HD Environmental Aspects Procedure Master; Aspect/Impact Table

3- Plans and procedures to achieve compliance with environmental requirements and to maintain that compliance

We customized the ISO14001 procedure to produce E 4.3.2 HD Legal Requirements Procedure Master and fashioned E 4.3.2.1.3 HD Legal Requirements Calendar as a practical way to track legal requirements. Included are Storm Water, Manure Storage, High Capacity Wells, WPDES permit, twenty-one Conservation Practices regulations of WDNR and any additional of which we become aware through Dairy Business Association or other legislative alerts

Our documented procedures are a workable way to identify the regulatory and other requirements associated with HD's activities. We have developed operational controls to ensure that compliance is achieved through the actions of HD's employees, use of training programs to promote compliance, acceptance of responsibilities, and

compliance verification through routine monitoring of projects and internal auditing of the management system.

In 2006, one Corrective and Preventive Action was developed for a compliance error. HD contacted supplier, additional training item was incorporated.

Referenced Documents: E 4.3.2 HD Legal Requirements Procedure Master, E 4.3.2.1.3 HD Legal Requirements Calendar, E 4.4.6 HD Operational Control Procedure Master, E 4.4.2 HD Competence, Training and Awareness Procedure Master, E 4.5.1 HD Monitoring and Measurement Procedure Master, E 4.5.5 HD Internal/External Audits Procedure Master, NRCS_CSPs.xls

4- Identification of all environmental requirements applicable to the entity.

To determine what was applicable to our facility, we relied heavily on Natural Resource Technology (NRT) consultants. Tim Anderson, Laura Paprocki, and Marla Shoop, met with us on farm and in group meetings at Lakeshore Technical College in late 2005 and through June 2006, to identify the environmental requirements applicable to our operation.

In addition, we list known regulations and permits regarding storm water, manure storage, high capacity wells, WPDES, and Conservation Practice Standards.

HD belongs to Dairy Business Associates, an organization of dairy farms and the agribusinesses that serve them. Kenn Buelow, Dairy Manager, meets with members of DBA; knowledge of applicable environmental requirements is shared among participants. WDNR contacts include Brian Ellefson and Tom Eggert.

Referenced Documents: See section 3 above.

5-A process for setting environmental objectives and developing the appropriate action plans to meet the objectives

Holsum Dairy customized the ISO 14001 procedure regarding objectives and targets. The careful analysis of our various business enterprises was the most time consuming and painstaking endeavor of the year's tasks. Simply identifying and detailing and categorizing required an intimate knowledge of processes and daily practices. Fortunately, Dairy Manager Kenn Buelow is well versed in every phase of the operation. We assigned numeric values to the categories, calculated and evaluated numeric scores, and decided on EMPs for 2006.

Each EMP contains these sections: Environmental Objective, Target, Measurement, Responsible Person(s), Target Completion Date, Plan to accomplish objective, Organizational Controls, Resources Needed, Estimated Cost, Status, Actual Measured Improvement, Actual Completion Date, Actual Final Cost.

The first twelve impacts were the highest scoring. Number 13 scored only 14 but was included for possibly idle construction crews; Number 13 is deferred; they were always busy. Number 2 was deferred because of the enormity of the task. Number 12 was accomplished with a phone call, documentation was deemed unnecessary effort.

1	A-Dairy farm animals and facility	G-minimize fire/explosion damage to people	S=99
2	A-Livestock sales	G-avoid quarantine due to foreign pest introduction	S=89
3	A-Machinery and cows	G-prepare for employee accident/injury	S=76
4	A-Hoof health baths	G-minimize copper sulfate applied to land	S=65
5	A-Store fuel on site	G-prevent/contain spills	S=63
6	A-Milking cows-3 shifts	G-avoid employee injury from weather events	S=57
7	A-Manure digester	G-eliminate use of fossil fuels to run generator engine	S=53
8	A-Produce Grade A milk	G-Prevent/contain leaks of machine sanitizers	S=52
9	A-Machinery operation	G-Prevent refueling spills	S=48
10	A-spreading manure	G-reduce tracking on road	S=48
11	A-Storing haylage and corn silage	G-reduce unpleasant odors	S=47
12	A-haul milk to plant	G-minimize hauling for neighbors' sleep times	S=45
13	A-Cool break rooms+ offices	G-improve air conditioners' efficiency	S=14

The E 4.3.3 HD Objectives and Targets Procedure Master describes our process and how the management system supports achievement of the environmental goals. Holsum Dairy requires environmental objectives to be set yearly and reviewed semi-annually.

Referenced documents: E 4.3.3 HD Environmental Objectives and Targets Procedure Master, EMPs HD 2006 -1, Air Conditioners; -2, Copper Sulfate Foot Bath Usage; -3, Fire Extinguishers; -4, Fueling Spills; -5, Manure App By Hose; -6, Pile Covering

6- Structure of operational control

Holsum Dairy formulated an operational control procedure. Work instructions define position responsibilities and task lists describe how environmental responsibility is defined.

As a small business, we must combine and integrate rather than add a layer of administration. Our operational controls in task lists and maintenance schedules will reference our Environmental Policy specifically where an impact occurs.

We consider our task lists and maintenance schedules proprietary. They may be viewed by appointment.

Referenced documents: E 4.4.6 HD Operational Control Master, work instructions, task lists

7- An employee training program to develop awareness of and competence to manage environmental issues

Employees learn about proper disposal of waste and recyclables, safe handling of animals, equipment, and themselves from the moment they are hired. Our Employee

Manuals, in English and in Spanish, now have a copy of the environmental policy statement. Framed or laminated copies of the Environmental Policy are on display in our entryway and employee break room.

Work instructions are filed on the office computer in the proprietary My Dairy on Time® folder. Environmental concerns are included in training task lists. We see no need for a separate set of environmental training instructions, since environmental concerns are integral to all our operations.

Examples:

In the milker task list, "Place all disposable gloves in waste barrels. Do not flush into manure system. This is a reminder to dispose of all waste in accordance with our Environmental Policy.

In the hoof trimmer task list, "When gloves no longer grip or protect, dispose of them in waste barrels. This is a safety issue for you and a reminder to dispose of all waste in accordance with our Environmental Policy."

Revision of task lists whether from Green Tier procedures, staff meetings, or supervisor initiative, is generally entered within 24 hours.

Referenced Document(s): E 4.4.3.1.1 HD EMS Int. Communications, Employee Manual, Master; E 4.4.2 HD Training, Competence and Awareness Procedure Master, E 4.4.7 HD Emergency Preparedness and Response Procedure Master

8- A plan for taking actions to prevent environmental problems and for taking emergency response and corrective actions when environmental problems occur

The required Green Tier procedures brought emergency response to the fore. The majority of our work force is Hispanic. Communicating emergency response to them became a high priority. Our first step was fire safety. We added fire extinguisher icons to the official dairy site map. This enhanced even the Spanish version of the map. The second step was contacting local fire and ambulance personnel. Their needs were: easy access to Material Safety Data Sheets, finding the area of the dairy where the problem was, and for us to call ahead if an interpreter was needed.

Our fire drill uncovered the need for more specificity in our training, and the need for more training and icons for the propane shutoff valves on the dairy map. Our training list draft now contains this information. Also, the needs for more specificity in calling supervisors and how to respond to the NOAA weather emergency signals (Spring 2006) were exposed and addressed.

One manure spill in a field was phoned in, resolved using pre-arranged procedures, and a letter was promptly submitted. Copy attached. Our custom hauler has added an item prohibiting the spreading of manure on highly compacted soils.

Referenced Documents: E 4.4.7 HD Emergency Preparedness and Response Procedure Master; E 4.5.3 Nonconformity, Corrective Action, and Preventive Action Procedure Master; E 4.5.3.6 Nonconformity, Corrective Action and Preventive Action Log, attached DNR08152006.doc

9-A communication plan for collaboration with employees, the public, and the department on the design of projects and activities to achieve continuous improvement in environmental performance.

We have an external communication form for detailed environment related calls, and a log for more casual communications. To date, most external communications are positive, including that of our neighbor whose well water test was negative for E. coli. The dairy's manager attends township (Chilton) meetings and has phone conversations with town board members. Numerous requests for tours for school, technical college, extension, veterinary college, civic groups, conservation clubs and other agriculture associations (like PDPW) have been filled. We neglected to enter them in the log until Summer 2006.

Public hearing interactions, to date, often have been confrontational. Our task has been to educate our fellow citizens about our solutions to their concerns. Honest assessment of people's issues keeps our focus on continuous environmental improvement. In the future, we aim for proactively determining the concerns of those who are legitimate stakeholders in our enterprise.

Our internal communications include the employee manuals (English and Spanish languages), and notes in our office 'suggestions and concerns' notebook.

As we embrace and understand more deeply the Green Tier system, we will then be able to identify where vendors might improve. Current example: a major supplier accepts return of shipping containers and reuses them.

Referenced Documents: E 4.4.3 HD Communication Plan Master, E 4.4.3.1 HD Internal Communications Plan Master, E 4.4.3.1.1 HD EMS Int. Communications, Employee Manual, Master, E 4.4.3.2 HD External Communications Record Master

10-Procedures for control of documents and for keeping records related to environmental performance.

Our records policy is contained in E 4.5.4 HD Control of Records Master. When contractually required, records are supplied to customers and governmental agencies; documents referenced in Green Tier reports are available for inspection by appointment.

Filename and path autotext is included in documents' footers to facilitate verification of the current official version.

Documents are maintained on HD computers. Access is password protected. The Dairy Manager and Environmental Management System representative can change master documents. Others may only view them.

Documents that have expired are watermarked as OBSOLETE and kept in the Outdated_Obsolete folder.

Referenced documents: E 4.4.2 HD Competence, Training and Awareness Procedure Master, E 4.5.4 HD Control of Records Master

11- Environmental Management System Audits

Our Internal/External Audits Procedure defines the requirements for audits and documentation of audits.

On March 26, 2006, we finished a GEMI based internal audit, as explained to us by NRT consultants. Through that process, we are self certified, as allowed in this first

year. All components were found to be present. An internal audit by Green Tier cooperative member Ben Hesselink was conducted in October 2006

Referenced documents: E 4.5.5 HD InternalExternal System Audits Procedure Master

12- A plan for continually improving environmental performance and provision for senior management review of the plan

The Green Tier generated documents and procedures comprise our plan for improving environmental performance. To expedite management review, we maintain a graphic overview sheet to keep the multiple requirements and deadlines in order. Digital media reminders are employed to ensure follow up by responsible parties.

Management reviews are scheduled annually in February, March, or April, and within 30 days of an audit. Opportunities for improvement will be considered for the following year's objectives. HD management, in its March review, was able to measure progress to date and to determine actions for the remainder of the Green Tier year. The human safety audit items have been completed as originally stated. The foot bath-copper sulfate, manure spreading, feed storage projects, fuel spill, and manure digester EMPs require cost figures to finalize documentation.

The review was comprised of the EMS audit document, aspects and impacts document, examples of procedures, examples of EMPs, and examples of various attempts to organize and manage all the data. Mr. Buelow suggested an all encompassing spreadsheet would track changes and allow efficient awareness of approaching deadlines. By measuring adroitly, we can manage effectively in what has been, and still aspires to be, a minimally documented enterprise. He also suggested organizing existing metrics.

We discussed the benefits relative to the costs associated with HD's Green Tier participation. Future participation will depend on net benefits

As a result of Mr. Hesselink's audit, we have scheduled for 2007 more training of employees, more precise line items in employee task list/review forms, and more time devoted to streamlining required Green Tier documentation.

In our size company, the Dairy Manager, Kenn Buelow is an integral part of HD's daily operations. As 'senior manager', he is dedicated to improving environmental performance and to reviewing procedures as part of enhancing performance at all levels.

Referenced documents: E 4.6 HD Management Review Procedure Master, E 4.6 HD March 2006 Management Review Master