

From: Maria@qai-inc.com on behalf of [DeVincenzo Maria](#)
To: jim_whitehurst@shamrockfoods.com
Cc: [NOPACAAverseActions](#); [Schmale Valerie](#); lynne@qai-inc.com (b)(6)
Subject: (R)egistered: Proposed Suspension - Shamrock Farms Co.
Date: Friday, January 08, 2010 1:08:55 PM
Attachments: [M_Shamrock Farms PS 010810.pdf](#)
[USDA Appeals Process.pdf](#)

*** (R)egistered E-mail ***



This is a Registered E-mail® message from **DeVincenzo Maria**.

Please see the attached correspondence regarding your organic certification.

Maria DeVincenzo
Quality Specialist
Quality Assurance International
9191 Towne Centre Drive, Suite 510
San Diego, CA 92122 USA
(858) 200-9727 Phone
(734) 827-6177 Fax
www.qai-inc.com



please don't print this e-mail unless you really need to

For more information about the RPost® Registered E-mail® service visit <http://www.rpost.com>



9191 Towne Centre Drive, Suite 510
San Diego, CA 92122 • USA
858-792-3531 • Fax: 858-792-8665
www.qai-inc.com

January 8, 2010

Mr. Jim Whitehurst
Shamrock Farms Co.
P.O. Box 280
Stanfield, AZ 85272
USA

Re: Combined Notice of Noncompliance and Proposed Suspension

Dear Jim,

This letter is an official Notice of Noncompliance and Proposed Suspension pursuant to the USDA National Organic Standards, 7 CFR Part 205.662.

Upon review of the recent unannounced inspection, QAI has noted violations that make it difficult to verify your operation's compliance with the NOP. As such, QAI is proposing suspension of the certification of this operation to the National Organic Program ("NOP").

The proposed effective date of your suspension is **February 8, 2010**, your operation will no longer be certified and eligible to sell, label, or represent products as organic.

If suspended, your future eligibility for certification is set forth in section 205.662(f), which provides:

Eligibility. (1) A certified operation whose certification has been suspended under this section may at any time, unless otherwise stated in the notification of suspension, submit a request to the Secretary for reinstatement of its certification. The request must be accompanied by evidence demonstrating correction of each noncompliance and corrective actions taken to comply with and remain in compliance with the Act and the regulations in this part.

If you choose, you may file an appeal of this Notice of Suspension pursuant to 205.681. The appeal should be submitted in writing to: Administrator, USDA, AMS, c/o NOP Appeals Staff, STOP 0203, Room 3507-S, 1400 Independence Avenue S.W. Washington, D.C. 20250-0203. The appeal must be filed within 30 days of receipt of this letter.

Alternately, if you choose, you may request mediation pursuant to 205.663. Your request for mediation should be received in this office, in writing, prior to **February 8, 2010**. If we accept your request for mediation and the mediation is unsuccessful, you will have 30 days from termination of mediation to appeal this proposed suspension. If QAI rejects your request for mediation, you may file an appeal within 30 days of the date of the written notification of mediation rejection. Please see section 205.663 for further details.

The reasons for proposed suspension is that Shamrock Farms Co. failed to comply with sections of the National Organic Standards noted in point #1 below:



1. The NOP, section 205.239(a), requires that the producer of an organic livestock operation establish and maintain livestock living conditions which accommodate the health and natural behavior of animals, including:

- Access to the outdoors, shade, shelter, exercise areas, fresh air, and direct sunlight suitable to the species, its stage of production, the climate, and the environment;

It was noted at the inspection that access to the outdoors is provided but limited; notably access to pasture was denied from May 2009 to December 15, 2009 due to heat and pasture development. This issue was identified in QAI's noncompliance letter dated December 1, 2008, which states:

The inspector noted that for the 2008 winter, the (b)(4) acres of pasture on (b)(4) was the extent of available land for pasture. Please provide your written plan to provide adequate pasture for your organic livestock. The plan must include acreage, forage description, the timing of the cropping cycles such that there will always be ground available for grazing, animal numbers, and the duration/frequency of their stay on the pasture as well as an assessment of the pasture's ability to provide substantive nutritive value to the animals pastured.

Shamrock Farms' response (i.e., "Answer to non compliance letter number 4") stated that (b)(4) would be used as pastures for (b)(4) and that (b)(4) would be used for (b)(4). The use of these fields as grazing pastures would increase the frequency of access to pasture, as well as the available land acreage per head. However, at the recent unannounced inspection on December 15, 2009, it was noted that these corrective actions had not been implemented. Specifically, the inspector noted that:

- (b)(4) could become pasture and although there is a plan for this, at this time it used as crop ground.
- (b)(4) is still being used for field crops. At this time, none of (b)(4) is planned for (b)(4). Although the area between (b)(4) and (b)(4) is planned for (b)(4), this project is on hold until the final pasture rule is out.

Because the proposed corrective action plan was not implemented and the issue of limited access to pasture has not been resolved, QAI is proposing suspension of the Shamrock Farms Organic Dairy.

7 CFR Part 205.239(a)

Additionally, the following issues of noncompliance would also need to be addressed within the stated time frame below.

Within Thirty Days

Before QAI is able to proceed with the evaluation of your organic certification, the deficiencies identified below must be addressed. Please provide information about how you will correct each deficiency, or documentation that it has been corrected, within **Thirty Days (30 days)** of receipt of this letter. Alternatively, you may provide additional information to demonstrate that your operation complies with the referenced section of the National Organic Program:

2. Several updates were noted on your Herd Pasture Profile (HPP). Please send to QAI for review clean unverified copies of your HPP for 2009 and 2010. The HPPs should accurately reflect herd numbers, pasture fields, pasture acreage, and acres per head.
7 CFR Part 205.201(a)(2), 205.302
3. Please provide certification documentation from (b)(4) verifying NOP compliance for organic (b)(4).
7 CFR Part 205.100(a)

Prior to Annual Monitoring Date

Please include a **written response** to **each** item when you submit next year's application for continuation of certification:

4. The maps on file do not legibly indicate the field acreages very well, which makes it difficult to verify that acreages correspond between the IFPs and the maps provided. Please develop and send to QAI for review a copy of your new accurate maps, which clearly reflect acreage and are drawn to scale. Show all adjacent land use and potential sources of contamination. Include all public and private roads, distance between your organic crops and conventional crops on all borders, storage sheds / areas, wells, and other structures.
7 CFR Part 205.201(a), (5), 205.202(c)

If you have any questions regarding this letter, please feel free to contact us.

Sincerely,

(b)(6)

Maria DeVincenzo
Quality Specialist

cc: National Organic Program Administrator
Lynne Grayton, QAI Certification Project Manager
(b)(6) QAI Inspector

Attachments: USDA Appeals Process



Quality Assurance International
An NSF International Company

Global Leader in Organic Certification Services • Operations: US • Canada • Japan • Latin America • European Union



Appeals Process: **Certified Organic Operations or Certification Applicants**

The National Organic Program (NOP), accredited certifying agents, and State Organic Programs (SOPs), where applicable, have a responsibility to work cooperatively with certified organic operations or applicants for certification to identify problem areas and resolve issues of alleged noncompliance long before a decision to revoke, suspend, or deny certification is made.

However, if these efforts fail, and you are notified of a decision with which you don't agree, you have the right to appeal that decision.

Part I of this brochure explains the appeals procedure if your organic operation is located in a State *without* a USDA-approved SOP. Part II explains the process that must be used in a State *with* a USDA-approved SOP. Part III explains the process that must be used when an adverse action is initiated by the NOP Manager.

In all of these cases, your appeal will not be reviewed, heard, or decided by anyone involved in making the decision being appealed. USDA or the SOP will send all communications involved in the appeals process to your place of business, using a delivery service that provides dated return receipts. You must also use a delivery service that provides dated return receipts.

Part I. Appeals in States with No SOP

How much time do I have to appeal?

You must appeal within 30 days of receiving the decision letter, or within the time frame specified in that letter—whichever is later. Unless you appeal on time, the decision to deny, revoke, or suspend your certification will become final.

What should I put in my appeal?

You must include the following information in your appeal:

- a copy of the decision you are appealing; and
- a statement of your reasons for believing that the decision was not proper or did not follow National Organic Program regulations, policies, or procedures.

Who will make the decision on my appeal?

The Administrator of the Agricultural Marketing Service will review the information you put in your appeal and make a decision on whether to sustain or deny your appeal.

Where do I send my appeal?

Administrator, USDA, AMS
c/o NOP Appeals Team
STOP 0203, Room 1114-S
1400 Independence Ave., SW
Washington, DC 20250

What happens if I win?

If the Administrator sustains your appeal, you will be granted certification, or if the decision was for revocation or suspension, you will be notified that your certification will continue.

What happens if I lose?

If the Administrator denies your appeal, you will be notified that a formal proceeding to deny, suspend, or revoke your certification is being initiated. An Administrative Law Judge will handle this proceeding. Your notification letter from the Administrator will contain instructions on what to do next, if you are not satisfied with the decision.

If I want to appeal further, what do I do?

There are two more levels of appeal within USDA, an Administrative Law Judge, and then a Judicial Officer. You will be notified at every step of exactly what to do, should you wish to appeal to a higher level. Appeals at these two levels will be heard as near as possible to your place of business or residence.

I've lost my appeal at the highest level of USDA—what next?

You may appeal the decision of the USDA Judicial Officer to the U.S. District Court for the district in which you are located.

Part II. Appeals in a State with an SOP

Included in USDA's requirements for approving a State Organic Program, is the approval of the SOP's appeal procedures. An SOP's appeal procedures must be equivalent to those provided for under the National Organic Program, as described in Part I. The following appeals procedures apply to decisions made by State Organic Programs or accredited certifying agents.

How long do I have to appeal?

You must appeal within 30 days of receiving the notification letter, or within the time frame specified in that letter—whichever is later. Unless you appeal on time, the decision to deny, revoke, or suspend your certification will become final.

What should I put in my appeal?

You must include the following information in your appeal:

- a copy of the decision you are appealing; and
- a statement of your reasons for believing that the decision was not proper or did not follow National Organic Program regulations, policies, or procedures.

Where and to whom do I send my appeal?

You must send your appeal to your State Organic Program. Your notification letter will provide exact instructions.

What happens if I win?

If your appeal is sustained, you will be granted certification, or if the original decision was for revocation or suspension, you will be notified that your certification will continue.

What happens if I lose?

If the State Organic Program denies your appeal, you will be notified of the next step you may take in the State appeals process.

I've lost my appeal at the highest level of the State appeals process—what next?

You may appeal the final decision of the State to the U.S. District Court for the district in which you are located.

Part III. Appeals of Adverse Actions Initiated by NOP Manager

Follow the procedures provided in Part I.

Where can I find more information on the appeals process?

Subpart G, Administrative, sections 205.680 and 205.681 of the NOP regulations cover the "Adverse Actions Appeal Process." Further discussion of this process can be found in the preamble to the NOP regulations.

Schmale, Valerie

From: Guo, Ruihong
Sent: Friday, February 13, 2009 11:14 AM
To: kastel@cornucopia.org
Cc: Schmale, Valerie
Subject: RE: Rockview/Shamrock complaints

Mr. Kastel:

We have yet to receive the additional information requested in November 2008. Supporting information would help substantiate allegations of noncompliance. Please provide this information to us at your earliest convenience.

I do not recall receiving a phone message from you. Nonetheless, I'd be happy to discuss the matter with you. I will be on travel the next week or so. Maybe we could talk the first week of March.

Thanks,
Ruihong Guo

Chief
Compliance & Enforcement Branch
NOP

From: kastel@cornucopia.org [mailto:kastel@cornucopia.org]
Sent: Friday, February 13, 2009 11:00 AM
To: Guo, Ruihong
Subject: Rockview/Shamrock complaints

Dear Ms, Ruihong,

When we last corresponded in November I had let you know that an extremely heavy travel schedule in the fall would prevent me from responding to your request for additional information regarding the Shamrock and Rockview complaints in a timely manner.

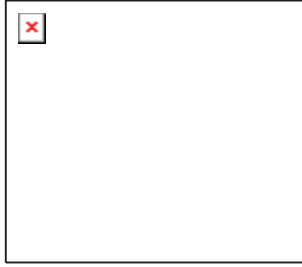
I am disappointed that when I left you a phone message, in December, stating that I would like to discuss the parameters of our collaboration on these complaints, that I never have received a response.

I would still like to discuss this matter with you.

Sincerely yours,

Mark A. Kastel
Codirector
The Cornucopia Institute

Mark A. Kastel
The Cornucopia Institute
kastel@cornucopia.org
608-625-2042 Voice
866-861-2214 Fax



P.O. Box 126
Cornucopia, Wisconsin 54827
www.cornucopia.org

From: Maria@qai-inc.com
To: [Robinson Barbara -AMS](#)
Cc: [Schmale Valerie](#); [Guo Ruihong](#); [Bradley Mark](#)
Subject:)egistered:
Date: Friday, November 14, 2008 4:58:13 PM
Attachments: [ATTACHMENT.TXT](#)
[111408 req to USDA.pdf](#)

*** (R)egistered E-mail ***



This is a [Registered E-mail](#)[®] message from **DeVincenzo Maria**.

Dear Ms. Robinson,
Please see the attached letter requesting the evidence stated by Cornucopia in the October 12, 2008 letter that they are willing to share with our investigators.
Thank you.

Sincerely,

Maria

Maria DeVincenzo
Quality Specialist
Quality Assurance International
9191 Towne Centre Drive, Suite 510
San Diego, CA 92122 USA
(858) 792-3531 Phone
(734) 827-6177 Fax
www.qai-inc.com

For more information about the RPost[®] Registered E-mail[®] service visit <http://www.rpost.com>



9191 Towne Centre Drive, Suite 510
San Diego, CA 92122 • USA
858-792-3531 • Fax: 858-792-8665
www.qai-inc.com

November 14, 2008

Barbara C. Robinson
Acting Director, National Organic Program
United States Department of Agriculture
Agricultural Marketing Service
1400 Independence Ave., S.W.
Room 4003, STOP 0268
Washington, DC 20250-0268

Re: NOPC-003-09 – Shamrock Farms Complaint - Investigation

Dear Ms. Robinson,

QAI has scheduled the inspection of Shamrock Farms to investigate the complaints received alleging violations of 7 CFR 205.237(a); 205.238 (a)(3) and (4); and 205.239(a)(1) and (2) and (b)(1)(2)(3) and (4). The inspection is scheduled for Wednesday and Thursday, November 19th and 20th, 2008.

Per the October 12, 2008 complaint letter from Cornucopia, the complainant states *"We are willing to share with your investigators all of the factual evidence we have directly gathered from our site visit to the Shamrock Farms facility"*. QAI respectfully requests a copy of this documentation be provided to us to share with our investigator.

Thank you.

Sincerely,

(b)(6)

Maria DeVincenzo
Quality Specialist

Cc: Mark Bradley, Chief, Accreditation, Auditing, & Training Branch
Valerie Schmale, Compliance and Enforcement Ag. Marketing Specialist,
Ruihong Guo, Branch Chief Compliance & Enforcement NOP



Quality Assurance International
An NSF International Company

Global Leader in Organic Certification Services • Operations: US • Canada • Japan • Latin America • European Union

From: Maria@qai-inc.com on behalf of [DeVincenzo Maria](#)
To: jim_whitehurst@shamrockfoods.com
Cc: [NOPACAAverseActions](#); [Schmale Valerie](#); john@qai-inc.com; (b) (4)
Subject: (R)registered:
Date: Friday, February 05, 2010 1:15:49 PM
Attachments: [020510 Letter to Shamrock Farms.pdf](#)
[USDA Appeals Process.pdf](#)

*** (R)registered E-mail ***



This is a Registered E-mail® message from **DeVincenzo Maria**.

Dear Jim,

Please see the attached letter regarding your response to the January 8, 2010, Combined Notice of Noncompliance and Proposed Suspension.

Regards,

Maria DeVincenzo
Quality Specialist
Quality Assurance International
9191 Towne Centre Drive, Suite 510
San Diego, CA 92122 USA
(858) 200-9727 Phone
(734) 827-6177 Fax
www.qai-inc.com



please don't print this e-mail unless you really need to

For more information about the RPost® Registered E-mail® service visit <http://www.rpost.com>



9191 Towne Centre Drive, Suite 510
San Diego, CA 92122 • USA
858-792-3531 • Fax: 858-792-8665
www.qai-inc.com

February 5, 2010

Mr. Jim Whitehurst
Shamrock Farms Co.
P.O. Box 280
Stanfield, AZ 85272

Re: January 8, 2010 Combined Notice of Noncompliance and Proposed Suspension

Dear Jim:

Thank you for submitting your corrective action in response to the Combined Notice of Noncompliance and Proposed Suspension letter dated January 8, 2010.

The response you submitted is not adequate to resolve the noncompliance. The issue of lack of access to sufficient pasture (as per 7 CFR Part 205. 239(a)) has not been resolved, and the justification provided for restricting pasture access has not been accepted by QAI.

Suspension will be effective March 5, 2010, unless you (1) request mediation pursuant to 205.663; or (2) file an appeal pursuant to 205.681 (See attached).

If suspended, your future eligibility for certification is set forth in section 205.662(f), which provides:

Eligibility. (1) A certified operation whose certification has been suspended under this section may at any time, unless otherwise stated in the notification of suspension, submit a request to the Secretary for reinstatement of its certification. The request must be accompanied by evidence demonstrating correction of each noncompliance and corrective actions taken to comply with and remain in compliance with the Act and the regulations in this part.

If you choose, you may file an appeal of this Notice of Suspension pursuant to 205.681. The appeal should be submitted in writing to: Administrator, USDA, AMS, c/o NOP Appeals Staff, STOP 0203, Room 3507-S, 1400 Independence Avenue S.W. Washington, D.C. 20250-0203. The appeal must be filed within 30 days of receipt of this letter.

Alternately, if you choose, you may request mediation pursuant to 205.663. Your request for mediation should be received in this office, in writing, prior to **March 5, 2010**. If we accept your request for mediation and the mediation is unsuccessful, you will have 30 days from termination of mediation to appeal this proposed suspension. If QAI rejects your request for mediation, you may file an appeal within 30 days of the date of the written notification of mediation rejection. Please see section 205.663 for further details.



Quality Assurance International
An NSF International Company

We appreciate your prompt response to this request. Please do not hesitate to contact, John Joseph, your Certification Project Manager for clarification. We are happy to assist you further should you have additional questions about the USDA's NOP requirements or QAI's organic certification process.

Sincerely,

(b)(6)

Maria DeVincenzo
Quality Specialist

Cc: NOPAdverseActions@ams.usda.gov, NOP Compliance & Enforcement, John Joseph, Certification Project Manager, Rod Crossley

Attachment: NOP Appeals Process

Schmale, Valerie

From: Schmale, Valerie
Sent: Thursday, February 18, 2010 10:29 AM
To: 'Grealy, Stephen'; Guo, Ruihong
Cc: 'Walden, Jessica'; 'DeVincenzo, Maria'; 'bowen@nsf.org%inter2'; Schmale, Valerie
Subject: RE: Shamrock Inspection timelines
Attachments: Schmale Valerie.vcf

Importance: High

Hi Jackie, Jessica, Maria, and Stephen:

It was a pleasure speaking with all of you this morning regarding the issue of Shamrock.

Just to reiterate the major points of the conversation for the record:

1. Established that Shamrock has not had sufficient quality and quantity of organic pasture from initial certification.
2. Established that QAI, although meeting the annual inspection requirements of the NOP regulations, has not followed up appropriately on noncompliance issues with Shamrock. QAI provided an Inspection Timeline document laying out the inspection cycle
3. Established that QAI will work on a settlement agreement with Shamrock whereby Shamrock will be suspended until such time as noncompliances are corrected satisfactorily to achieve compliance with NOP regulations
4. Stephen has discussed (b)(4) issues with Shamrock
5. Shamrock must submit an adjusted OSP for the organic dairy operation and follow it
6. Established that Shamrock is working to meet the requirements of the newly published pasture rule; although this is taking place, it does not preclude the fact that Shamrock was noncompliant up to this point, thus QAI is standing firm on the suspension until issues are corrected
7. QAI has implemented (b)(4) to prevent future issues with follow-up of noncompliance issues of certified operations
8. QAI will contact the NOP within two weeks with an update of the status of the mediation agreement with Shamrock

We look forward to speaking with you again.

Sincerely,
Val Schmale



From: Grealy, Stephen [<mailto:Grealy@gai-inc.com>]
Sent: Thursday, February 18, 2010 8:30 AM
To: Schmale, Valerie; Guo, Ruihong

Cc: Walden, Jessica; DeVincenzo, Maria
Subject: FW: Shamrock Inspection timelines

Hi Valerie, Ruihong
We are sending you the inspection timelines for you to have on the call
Thanks – talk soon
Stephen

From: DeVincenzo, Maria
Sent: Wednesday, February 17, 2010 3:53 PM
To: Grealy, Stephen; Walden, Jessica; Bowen, Jaclyn
Subject: Shamrock Inspection timelines

Here is a copy of the inspection timelines done for Shamrock Farms that we may want to have handy for the meeting tomorrow morning.

Maria DeVincenzo
Quality Specialist
Quality Assurance International
9191 Towne Centre Drive, Suite 510
San Diego, CA 92122 USA
(858) 200-9727 Phone
(734) 827-6177 Fax
www.qai-inc.com



please don't print this e-mail unless you really need to

Schmale, Valerie

From: Guo, Ruihong
Sent: Monday, April 13, 2009 12:22 PM
To: Schmale, Valerie
Cc: Wilburn, Tammie
Subject: FW: Rockview/Shamrock complaints
Attachments: image001.jpg

From: kastel@cornucopia.org [mailto:kastel@cornucopia.org]
Sent: Tuesday, March 31, 2009 4:31 PM
To: Guo, Ruihong
Cc: wfantle@cornucopia.org
Subject: RE: Rockview/Shamrock complaints

Dear Ruihong,

As per your request I am sending you this e-mail to confirm our interest in expediting a full investigation of the allegations set forth in our formal complaints pursuant to Shamrock Farms and Rockview Farms.

As I have stated in addition to documentary evidence, including photographs, the preponderance of information we can convey your staff, concerning alleged violations at these facilities, would be put forth in testimony I am willing to give under oath.

I visited both of these facilities in the spring of 2008 and observed what appeared to be gross violations of the federal regulations governing organic production.

Please let me know when you are ready to commence this investigation and I will make myself available.

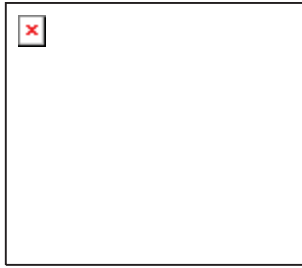
I understand that you are short on staff. But I would ask that you expedite this, at this point, since it is been some time since we filed these complaints and many months have gone by since we attempted to meet with you to discuss your procedural/ investigative approach.

Sincerely yours,

Mark

PS: Because of our communications difficulties I would appreciate it if you would click back to confirm the receipt of this message.

Mark A. Kastel
The Cornucopia Institute
kastel@cornucopia.org
608-625-2042 Voice
866-861-2214 Fax



P.O. Box 126
Cornucopia, Wisconsin 54827
www.cornucopia.org

From: Mark A. Kastel - The Cornucopia Institute [mailto:kastel@cornucopia.org]
Sent: Friday, February 13, 2009 9:59 AM
To: Ruihong Guo - NOP Compliance (ruihong.guo@usda.gov)
Subject: Rockview/Shamrock complaints

Dear Ms, Ruihong,

When we last corresponded in November I had let you know that an extremely heavy travel schedule in the fall would prevent me from responding to your request for additional information regarding the Shamrock and Rockview complaints in a timely manner.

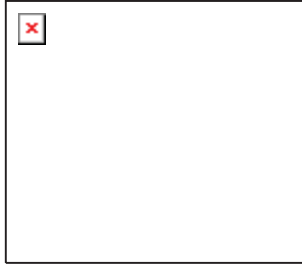
I am disappointed that when I left you a phone message, in December, stating that I would like to discuss the parameters of our collaboration on these complaints, that I never have received a response.

I would still like to discuss this matter with you.

Sincerely yours,

Mark A. Kastel
Codirector
The Cornucopia Institute

Mark A. Kastel
The Cornucopia Institute
kastel@cornucopia.org
608-625-2042 Voice
866-861-2214 Fax



P.O. Box 126
Cornucopia, Wisconsin 54827
www.cornucopia.org

Schmale, Valerie

From: DeVincenzo, Maria [Maria@qai-inc.com]
Sent: Wednesday, May 12, 2010 7:47 PM
To: Guo, Ruihong; Schmale, Valerie
Cc: (b)(6)
Subject: Shamrock 2008 & 2009 Pasture Logs
Attachments: 2008 Shamrock Farms - Pasture Log.pdf; 2009 Shamrock Farms - Pasture Log.pdf; Shamrock Farms - Pasture SOP.pdf; Shamrock Heat Explanation doc.pdf

Good Afternoon,

Attached you will find the Shamrock SOP, an explanation as to the impact extreme heat has on cows, the 2008 Pasture Log, and the 2009 Pasture log.

Please let me know if you need any additional information.

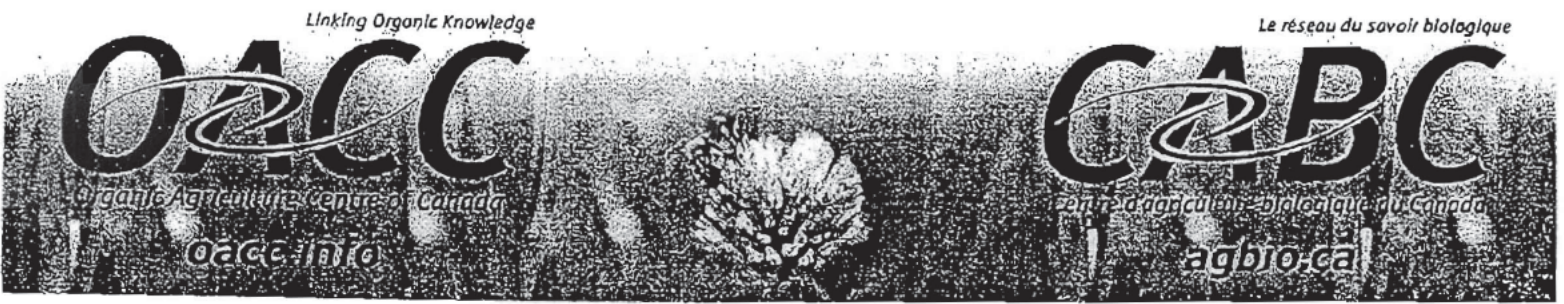
Regards,

Maria DeVincenzo
Quality Specialist
Quality Assurance International
9191 Towne Centre Drive, Suite 510
San Diego, CA 92122 USA
(858) 200-9727 Phone
(734) 827-6177 Fax
www.qai-inc.com



please don't print this e-mail unless you really need to

Privacy Warning: This e-mail is the property of Quality Assurance International (QAI), a division of NSF International. It is intended only for the person or entity to which it is addressed and may contain information that is privileged, confidential, or otherwise protected from disclosure. Distribution or copying of this email, or the information contained herein to anyone other than the intended recipient is prohibited. If you have received this e-mail in error, please immediately notify the sender by e-mail at the address from which it has been sent. Please delete and destroy any copies of this e-mail.



ANIMAL WELFARE ON ORGANIC FARMS FACT SHEET SERIES

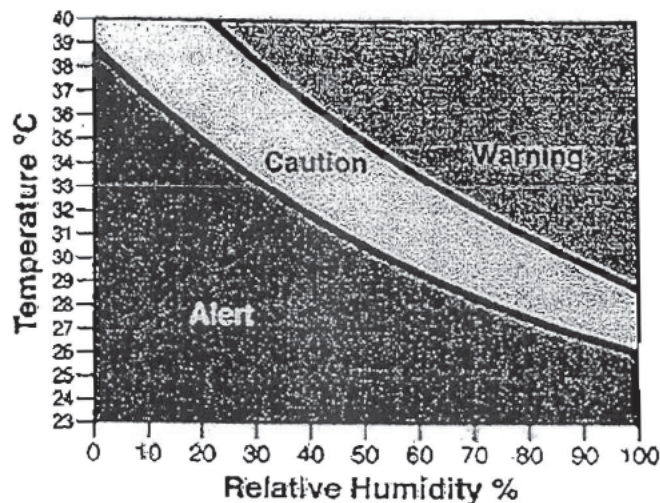
HEAT STRESS IN RUMINANTS

Produced in consultation with the ECOA Animal Welfare Task Force

THE PROBLEM

Heat stress can be a welfare issue for all types of livestock. In areas of Canada where high ambient temperatures occur during the summer months, the organic farmer must provide living conditions which give protection from excessive heat (see CAN/CGSB -32.310, 6.8.1).

Cattle can withstand low temperatures to -37°C but temperatures over 23°C (73°F) can cause stress when combined with high humidity, low air movement or direct sun. Stress starts to occur when the temperature humidity index is 68°F or above and becomes serious above $79/80^{\circ}\text{F}$. An abrupt increase in temperature when livestock have little time to adapt, or the first, very calm day during a heat wave is potentially lethal and can cause rapid dehydration in calves.



(Diagram from: Beat the Heat- Widowski 1998)

Heat stress can reduce productivity, cause reproductive problems such as reduced semen quality and lower birth weights, and compromise the immune system. Heat stress will reduce milk production in dairy cows: a 10% drop in yield at $27-32^{\circ}\text{C}$ ($80-90^{\circ}\text{F}$) and 50-90% humidity; and more than 25% drop at $32-38^{\circ}\text{C}$ ($90-100^{\circ}\text{F}$) with 50-90% humidity. The effect is more pronounced in higher producing cows.

Heat stress also lowers natural immunity making animals more vulnerable to disease in the following days and weeks. Problems with lameness occurring up to a few months after the event may also be attributed to heat stress.

Tolerance to heat varies:

- Holsteins are less tolerant than Jersey cows.
- Beef cattle with black hair suffer more from direct solar radiation than those with lighter hair.
- Lactating cattle are more susceptible than dry cows because of the additional metabolic heat generated during lactation.
- Heavier cattle over 1000lbs (455kg) are more susceptible than lighter ones.
- Sick or previously stressed animals are susceptible as are recently fresh cows.
- Cattle, alpacas and llamas are more prone to heat stress than sheep and goats (the comfort range of goats is $0-30^{\circ}\text{C}$ ($32-86^{\circ}\text{F}$)).

SOURCES OF INFORMATION

Extension service fact sheets from a variety of sources: Ontario Ministry of Agriculture (OMAFRA), South Dakota State University Cooperative Extension Service, Virginia Cooperative Extension, University of Nebraska, Ohio State University, University of Arkansas, NRCS Texas, and miscellaneous industry newsletters.

da Costa et al. 1992. Effect of air temperature and humidity on ingestive behaviour of sheep. *Int. J Biometeorology* 36: 218-222.

Hansford, P., and T. Pinkus. 1998. *The Herdsman's Introduction to Homoeopathy*.

Kendall et al. 2007. Sprinklers and shade cool cows and reduce insect avoidance behaviour in pasture based dairy systems. *J. Dairy Sci.* 90:3671-3680.

Pugh DG. 2001. *Sheep and Goat Medicine*, 1st ed. WB Saunders. p173

Radostis, D.M., Gay C.C., Blood D.C., and Hinchcliff, K.W. 2000 *Veterinary Medicine*, 9th ed. WB Saunders. p60-61.

Ruechel J. 2006. *Grass-fed Cattle: How to produce and market natural beef*. Storey Publishing, USA.

Rushen, J., de Passille, A.M., von Keyserlingk, M.A.G., and Weary, D.M. 2008. *The Welfare of Cattle*. Springer, Dordrecht, Netherlands.

Silanikove N. 2000. Effects of heat stress on the welfare of extensively managed domestic ruminants. *Livest. Prod. Sci.* 67: 1-18.

Widowski, T. 1998. *Beat the Heat, A Guide to Hot Weather and Shade for Ontario Cattle Producers*. The Colonel K.L. Campbell Centre for the Study of Animal Welfare, University of Guelph. 27pp.

CREDITS & ACKNOWLEDGEMENTS

Research and writing: Anne Macey with assistance from the ECOA Animal Welfare Task Force, Dr. Cassandra Tucker and Neil Anderson (DVM).

Production of this bulletin was supported by: the BC Organic Sector Development Fund.



(photo cr. Mike Main)

Funding for this bulletin provided in part by:



Agriculture and
Agri-Food Canada

Agriculture et
Agroalimentaire Canada

For more information:

Visit oacc.info or contact us at
P.O. Box 550 Truro, NS B2N 5E3
Tel: (902) 893-7256
Fax: (902) 896-7095
Email: oacc@nsac.ca

NSAC
NSAC. Embrace Your World.

Reducing Heat Stress on Cows

A 1,400 pound holstein cow giving 70 pounds of milk is the equivalent to about 15 one-hundred watt lightbulbs of heat generated. If cows are exposed to direct sunlight and the cow absorbs 80% of the solar radiation she is exposed to over 1/3 of her body, this cow can add another 10-15 lightbulbs for a total of 25-30 one-hundred watt lightbulbs of heat generated. On cool days, a cow can dissipate this heat. On warm and/or humid days, it cannot.

Cows experience heat stress when the temperature-humidity index (THI) is above 72. Dairy Cows literally become a furnace generating heat that *cannot be dissipated alone without a serious expense to feed intake, milk production and reproduction.*

Evaporative Cooling is Desired because heat is removed from the cow's surface to vaporize water. A cow generating the heat of fifteen lightbulbs needs to evaporate about 2 quarts of water per hour to keep her body temperature from rising. Cows dissipate this through respiration and sweating though cows are not very efficient at sweating. As temperatures reach 90 degrees, panting peaks at about 120-140 breaths per minute (5-6 times normal rates below 65 degrees) but, in addition to sweating, can only dissipate about half the water required to keep her keep cool.

Producers can come to the cow's aid by wetting the hair coat and blowing air over them to facilitate evaporation. With fans running continuously, wetting the hair coat for 2-3 minutes every half hour will supply the coat with 2.4 quarts of water for evaporation every hour which is the equivalent of 14 lightbulbs of heat production. Combined with the cow's 1.2 quarts from sweating and panting, it is possible to dissipate 3.6 quarts of water or 22 lightbulbs of heat.

Provide sprinkling systems at bunks to encourage them to eat. It's important to have the sprinklers on a timer to shut off for a minimum of 15 minutes to allow the fans to create the evaporative cooling effect on the cows. Avoid fine misting hoses that are on constantly—they actually create a water barrier around the cow's hide and *hold in the heat!*

Managing Heat Stress Begins by keeping the cows out of the sun during hotter periods of the day. Sun shades may be an option that provide 50 square feet of shade per head. Shades should be oriented from north to south to allow sun drying and be built on crushed limestone mounds or be portable to prevent mudholes and congregation in one area over time.

Keeping the cows in larger shaded areas or in the barn during hotter periods of the day may be the best option.

Many dairy barns are equipped with wind tunnel ventilation systems to create a constant breeze of 2.5 to 3 mph. Most stall barns require 3 or 4 large 48" fans installed on one end with inlets of 50 square foot per fan on the opposite end. The paybacks are usually within a short period of time as heat stress causes some serious financial costs to most dairy operations each year.

Ventilating More Efficient than Circulating

Circulating fans are *not* needed in wind tunnel systems as they only circulate the moisture laden air within the barn. Ventilation fans, on the other hand, exchange the inside air for outside air thus removing the moisture generated as cows dissipate heat. Circulation fans or stir fans are much less efficient in moving air per watt than ventilating fans. Large driveway fans are also *not* very efficient in cooling and circulate much more than ventilate.

Cows Generate Heat to Digest Feed and therefore eat less feed during periods of heat stress. Cows eat better at night and need a higher ratio of grain to forage dry matter. This change is helpful because the cow's maintenance increases as she uses more energy to cool herself and eats less feed. The forages produce more body heat than grain when digested. Cows should eat at least 1-1.5 pounds of forage equivalent for each 100 pounds of body weight daily. Rumen acidosis or inverted fat-protein tests are important to watch out for during summer months.

Supply Plenty of Clean, Fresh Water as milk is 87% water and heat stress can double water requirements. Provide spacious and multiple watering locations as cows exit the barn or parlor. Long waterers made of 18" PVC pipe cut in half lengthwise with a full flow float make nice waterers along exit alleys and can provide adequate linear feet of space per cow and prevent boss cow problems.

Remember, Cows Can't Do It Alone as the heat generated when temperatures increase make the cow a furnace. Not taking proactive measures to dissipate the heat created can have serious financial consequences.

ISU Fact Sheet LT-112 prepared by Larry Tranel, ISU Extension Dairy/Beef and Forage Specialist. Adapted from Mark Mayer, University of Wisconsin-Extension, Peter Hillman, Cornell University and Dennis Armstrong, University of Arizona. July, 2000.

IOWA STATE UNIVERSITY Cooperative Extension

Iowa State University and U.S. Department of Agriculture cooperating.
Extension programs are available without regard
to race, color, national origin, religion, sex or disability.

Figure 1. Temperature Humidity Index (THI)¹ for Dairy Cows. Modified from Dr. Frank Wierama (1990), Department of Agricultural Engineering, The University of Arizona, Tucson, Arizona.

DEG	RELATIVE HUMIDITY																					
F	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	
75															72	72	73	73	74	74	75	75
80	NO STRESS						72	72	73	73	74	74	75	76	76	77	78	78	79	79	80	
85		72	72	73	74		75	75	76	77	78	78	79	80	81	81	82	83	84	84	85	
90	72	73	74	75	76	77	78	79	79	80	81	82	83	84	85	86	86	87	88	89	90	
95	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	
100	77	78	79	80	82	83	84	85	86	87	88	90	91	92	93	94	95	97	98	99		
105	79	80	82	83	84	86	87	88	89	91	92	93	95	96	97							
110	81	83	84	86	87	89	90	91	93	94	96	97										
115	84	85	87	88	90	91	93	95	96	87												
120	86	88	89	91	93	94	96	98														

$$^1\text{THI} = (\text{Dry-Bulb Temp. } ^\circ\text{C}) + (0.36 \text{ dew point Temp., } ^\circ\text{C}) + 41.2$$

If more than two cows out of 10 have respiratory rates exceeding 100 breaths per minute, then immediate action should be taken to reduce heat stress.

extra heat generated as a result of metabolizing greater nutrients in the feed. In general, the decrease in milk production results from less feed intake by the cow. Two pounds of milk production is lost for every pound of decreased dry matter intake when temperature and humidity levels are high.

If you have problems determining if your cows are affected by heat stress, lock up 10 cows and take their rectal temperatures. If more than seven of the cows have temperatures above 103°F, the cows are probably exhibiting heat stress. Temperatures will be greater in the afternoon when environmental temperatures are high. In severe heat stress, rectal temperatures of cows may exceed 104°F. You may also take respiratory rates on the 10 cows. If respiratory rates are greater than 80 breaths per minute on at least seven of the cows, they are also probably exhibiting signs of significant heat stress. If more than five cows out of 10 have respiratory rates greater than 100 breaths per minute, then immediate action should be taken to reduce heat stress. If the dry matter intake of the feed and your milk production has decreased by 10 percent or more, your cows are also exhibiting heat stress. During severe heat stress, intake and milk production may decrease by more than 25 percent and weak cattle may die, especially older or sick animals.

Steps to Reduce Heat Stress

The first step to reduce heat stress is to provide cool water and shade for all milking and dry cows plus heifers. Water is the primary nutrient needed to make milk, accounting for over 85 percent of the content of milk. Also, the cow's

water requirement increases significantly as the environmental temperature rises. Cows drink up to 50 percent more water when the temperature/humidity index is above 80 percent. Table 1 shows that water intake goes from 21 gallons to 32 gallons as temperature goes from 86° to 95°F. It is extremely important that cows be provided cool water during periods of high temperature. It also is very important that cows have water in a location that is close to shade, since they will not travel great distances for water in a hot environment. Water should be placed away from the milking parlor but in an exit lane from the barn as well as near the feeding location of the cows. Water should be available for cows near their loafing area, either in the shade of native trees or artificial shade.

If cows are in close confinement, water should be placed every 50 feet. For many producers in Arkansas where cows are not housed in free stalls, water should be easily accessible to animals and located in a position such that cows do not have to cross areas of hot sun. In general, cows will not travel across 100 feet of open field when temperature, humidity and radiant solar heat are extremely high. Also, provide at least two water locations per group of cows. If possible, provide 2 feet of trough space for every 15 cows that use the water. For example, if you have 100 cows in a lot, you should have at least 12 feet of water trough. In addition, water flow should be at least 3 to 5 gallons per minute so that the trough will quickly refill. Minimum depths of 3 inches of water are necessary to accommodate the cow's muzzle. A minimum of 0.65 square feet of surface area per cow at single- or double-position waterers should be

Go

Phoenix AZ Monthly Temperature
 from 1896 to Present

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1896	54	55.7	62	63.7	74.4	88.4	88	88.6	82.9	71	59.6	54.2	70.2
1897	51.2	51.4	54.3	68.2	77.5	82.6	89.6	89.2	83.4	68.1	60.4	48.8	68.7
1898	47.2	58.8	57	71.7	73.4	84.8	92.2	89.8	84.2	71.5	57.4	48.8	69.7
1899	50.4	53	60	68.8	71.2	84.7	91	87.5	86.5	68.9	60.9	53	69.7
1900	56.1	56.4	65.6	63	77.6	86.1	91	86.2	78.9	71.3	62.8	53.7	70.7
1901	53.2	56.2	59.9	65.6	75	82.8	92.9	89.8	82.4	73.2	63.9	52.2	70.6
1902	52.5	56.4	57.4	69.8	75.2	86.4	88.6	89.6	83.6	74	58	51.8	70.3
1903	51.8	48.8	59.8	66.3	74.8	85.4	90	90.8	81.7	71	62.4	53.4	69.7
1904	48.4	58.9	62.9	68	77	86.3	88.4	88	80.5	70.8	62.2	52.7	70.3
1905	55.2	56.4	60	64.4	70.5	83.6	89.6	90	84.2	71.6	58.5	50	69.5
1906	51.2	58.2	60.8	65.3	73.4	84	91.4	85.7	81.7	71.6	58.6	54.3	69.7
1907	51.7	59.2	59.8	68.6	72.4	80.8	89.4	87.7	82.8	70.7	59.8	52.7	69.6
1908	53.4	54.2	61	67.6	71.5	81.8	88.6	87.9	81.7	66.8	61.4	53.2	69.1
1909	55.6	53.5	56.8	67	73	84.8	88.7	86.8	81	71.1	59.2	48.1	68.8
1910	51.2	54.1	65.6	70	79.1	85.1	89.6	89.6	86.2	72.3	60.2	54.6	71.5
1911	55.2	53	63.6	67.3	74.1	83.8	86	87.7	83.3	69	57.6	46.6	68.9
1912	53	56.2	58.6	63.1	73.8	86	85.4	86.2	78.9	68	59.8	48.9	68.2
1913	47.2	53.1	56.7	67.2	73.8	81.9	86.3	86.7	81.7	69.6	61.6	50.7	68
1914	54.8	55.1	63.6	68.5	75.6	84.6	88.8	89.2	84.5	71.2	63.9	50.3	70.8
1915	50	53.8	58.6	66.4	70.8	83.4	87.3	89.1	79.9	73.8	59.2	51.6	68.7
1916	50.8	59.6	64	68.2	74	83.9	89	87	80.9	66.2	55.8	47.1	68.9
1917	49	53.8	56.2	64.2	69	84.4	90	87.2	83.2	72.7	60.9	54.6	68.8
1918	49.6	55.2	62.4	67.5	72.2	88.6	88.3	84.6	82.4	71.8	57.2	49.6	69.1
1919	50.8	51.2	57.5	69.2	76.9	85.4	88.2	88.6	81.5	66.7	57	54.2	68.9

1920	53.3	57.6	58.4	64.6	75.9	84.4	90.6	86.4	80.4	67	58.6	49.7	68.9
1921	52	57.6	64.7	66.1	73.6	84.8	89.2	87.1	82.6	73.8	60.9	56	70.7
1922	48.6	54.4	57	63.2	76.4	86.2	90.6	89.4	85	71.6	55	55	69.4
1923	55.4	55.3	58.9	66.6	77.6	80.8	89.2	87.2	80.2	67.3	59.1	52	69.1
1924	50.4	58.8	56.6	65	78.8	87.5	90.2	89.4	85.6	71.2	62.8	52	70.7
1925	52	60.6	65	70.8	81.2	86.2	92.7	87.2	80.4	68.4	57.8	53.5	71.3
1926	49.4	58.1	63.9	68.6	75.8	87	89.6	88.9	83.4	73.5	61.6	51.2	70.9
1927	56.2	58.8	59.1	67.3	76	83.7	91.3	87.8	82.6	71.5	63.2	50.9	70.7
1928	53.2	55.1	64.1	67.8	79.4	85.6	91.8	88.4	85.2	72.6	60.2	51.4	71.2
1929	50.1	53	60.4	66.2	78	86.4	92	89.6	84	74.7	57.9	56.4	70.7
1930	52	60.4	60.6	72.2	71.7	86.8	91.3	89.6	82.2	70.4	60.2	52.2	70.8
1931	52.9	57.8	62.8	72.4	80.5	87	95.2	89.3	85.9	72.8	57.2	49.7	72
1932	47	56.8	61.9	69.2	77.3	85	91.8	92.1	87	71.5	63	49.3	71
1933	48.6	49.6	61.9	64.7	72.6	87.6	95	92.4	86.8	76.8	62.7	54.6	71.1
1934	54.5	60.8	70	74.8	83.2	83.8	94	90	84.8	75.5	61.4	56	74.1
1935	53.8	57.9	57.6	69.4	74.1	89.2	92	88.4	84.6	72.6	57.2	54.3	70.9
1936	52.8	56.4	64.6	73.1	81.7	90.3	93.2	91.1	83.6	73.2	61.8	53.2	72.9
1937	43.2	54.7	59.9	67.6	78.6	85.3	91.8	92.2	86.9	74.8	62.3	56.9	71.2
1938	55	56.4	59.4	69	76.1	85.8	90.2	89.9	86.8	71.6	56	55.9	71
1939	52.4	48.6	62.4	71.2	78.8	85.9	92.4	90.2	82.4	70.8	64.3	57.6	71.4
1940	55.6	56.8	64.8	70	81.5	88.9	91.5	91	85.2	73.5	58.9	56.8	72.9
1941	54.8	58.8	59.8	63	76.4	82.8	89.8	87.1	80.6	68.2	62.1	54.2	69.8
1942	54.5	52.8	59.1	66.3	75.2	85	92.7	88.8	85.2	72.3	63.5	56	71
1943	53.5	59.4	63.9	71.8	79	84.4	92	88.4	85.6	72.9	61.8	53.8	72.2
1944	51.8	52.7	58	64.8	75.6	81.2	89.9	91	83.9	74.9	58	54	69.6
1945	51.9	56.2	57.2	66.4	76	82.4	90	89.8	85	75	59.2	51.2	70.1
1946	51.3	54	62	73.6	76.7	87.8	90.4	89.8	84.6	67.6	56	55.8	70.8
1947	50.5	60.1	63.6	69.2	79.7	84.6	93	88.4	87.4	74	56.6	51	71.5
1948	53.6	53.8	56.9	69.8	77	85	91.1	91.4	86.2	74.6	57	52	70.7
1949	44.6	52.8	60.4	71.7	76.8	86.4	91	88.6	87	70	68.2	52.9	70.7
1950	51.3	60.1	66.3	72.9	75.9	85	89.4	89.9	81.9	78.6	65.3	58.9	72.7
1951	52.9	56.9	61.4	68.2	77.5	84	92.7	87.9	84.8	73.3	60.1	52.6	71
1952	52	55.1	55.9	67.9	80.7	85.6	90	91.1	86.9	78.6	57.9	52.7	71.2
1953	56.6	55.2	63.2	67.9	71.8	86.4	91.5	90.5	86	71.6	61.5	49.3	71
1954	52.3	61.1	58.3	71.6	78.2	84.7	91.3	88.4	86.2	74.9	64.6	54	72.1
1955	48.7	50.9	61.6	66.7	75.6	83.7	86.7	86.6	82.9	75.7	59.1	55.8	69.5

1956	56	50.9	61.6	66.3	76.9	86.9	87.9	85.8	84.6	69.7	57.8	53.3	69.8
1957	54	61.4	61.8	66.5	72.9	87.1	91.4	88	83.2	70.6	56.4	55	70.7
1958	53	58	57	66.7	81.3	89.1	93.6	92.7	86.6	76.6	61.4	56	72.7
1959	53.8	53.9	63.6	73.5	76.3	90.3	94	88.1	83.3	72.7	60.9	53.6	72
1960	48.5	51.5	65.1	70.4	77.8	90	92.4	89.7	85.9	70.6	60.5	50.5	71.1
1961	54.2	55.6	59.6	69.2	75.6	88.6	91.7	88.6	80.6	69.6	57.1	52.3	70.2
1962	51.5	55.7	56	72.3	73.5	83.1	90.2	91.7	84.3	71.6	61.9	55	70.6
1963	48.4	60.2	61	65.8	80	81.7	92	87.1	85.1	76.2	61.9	51.8	71
1964	46.7	49.3	56.5	65.2	73.7	82.6	90.6	86.2	80.9	74.9	55.5	52	67.8
1965	52.7	52.4	56.1	63.4	71.8	79	91	89	79.2	73.8	62.1	52.9	68.6
1966	48.2	49.7	61.2	69.8	80.1	86.8	93	90.9	82.9	70.9	60.5	52	70.5
1967	50.7	55.7	62.8	62.4	75.1	81.1	91.6	91	84.8	73.5	63.9	48.2	70.1
1968	52.4	59.7	59.9	66.7	76.6	86.2	90.2	86.5	83.6	72.7	59.2	49.5	70.3
1969	54.9	53	56.9	68.5	78.3	84.2	93.1	94.4	86	69.5	62.1	54.8	71.3
1970	52.1	60.2	59.5	64.7	79.6	88.1	95	92.5	82.2	69.1	61.4	52.6	71.4
1971	52.2	56.3	63.3	66.5	73.3	85.3	94.9	89.6	85.6	69.3	59.7	50.2	70.5
1972	51.4	59.1	70.6	71.4	78.3	87.8	94.4	89.9	84.8	71.9	58.1	52.1	72.5
1973	51.2	57.5	56.6	67.2	80.9	88.1	93.5	93.4	84.7	74.4	60.8	55.4	72
1974	54	56.7	64.5	70.6	80.2	92.2	92.4	91.2	87.2	75.9	61.5	50.6	73.1
1975	52.3	54	59	62.6	76.7	86.6	94.3	91.9	86.2	72.9	60.9	54.8	71
1976	55.4	60.7	61.5	68.7	80.7	87.9	91.6	90.7	83	74	64.1	55.6	72.8
1977	53.8	61.7	60.8	73.5	75.7	91.4	95	94.1	87.6	78.7	65.8	59.9	74.9
1978	56.6	58.7	65.6	69.2	78.5	90.9	94.6	91.4	86.3	78.6	61.5	51.7	73.6
1979	50.1	55.7	60.4	70.1	78.1	89.5	93.8	89.4	90.2	77.2	58.2	55.9	72.4
1980	56.6	60.6	60.7	69.8	76	88.9	95.6	92.2	87.3	75.6	64.1	61.3	74
1981	59.2	61.4	63.8	76	80.5	93.4	95.2	95.8	89.2	73.6	66.1	58.6	76
1982	53.9	60.1	62.4	72.5	80.4	88.1	93.7	93.7	86.7	73.5	61.9	54.1	73.4
1983	56	58.4	62.2	66.6	80.6	88.6	95.5	92.6	91	77.2	62.4	57.2	74
1984	57.4	60.1	67.6	70.7	87	88.9	91.7	91.2	87.5	71.4	61.9	53.7	74.1
1985	54.3	57.4	62.8	75.1	84.2	92.4	94.9	94.5	82.3	75.1	61.3	55.9	74.2
1986	61.4	61	69.3	74.2	82.3	92.8	92.3	94.5	84.1	74.7	65	56.4	75.7
1987	54.7	59.7	63.4	77.9	82.6	93	93.1	92.2	86.9	80.9	63.1	52.7	75
1988	55.1	62.5	66.3	73	81.4	93.1	96.2	93.9	87.4	82.4	64.4	55.7	76
1989	54.4	61.9	70.1	80.1	83.1	92.1	97.4	93.7	89.9	77.3	66.4	57	77
1990	55.6	56.6	67.2	76.2	81.1	93.8	93.6	90.8	87.6	78.7	65.9	53.6	75.1
1991	55.9	66	60.3	72.2	79.7	87.8	95.1	94.5	88.5	80.2	63.5	57.3	75.1

1992	56.4	62.1	64.7	77	83.1	90.1	92.8	92.3	90.5	79.8	61.5	53.8	75.3
1993	58.2	58.2	65.7	73.8	83.7	89.6	92.9	91.6	87.9	76.7	61.4	56.2	74.7
1994	56.8	58.1	65	71.8	78.3	92.2	93.9	95.3	86.9	73.1	58	55.3	73.7
1995	54.5	63.2	54.3	68.4	76.3	86.2	94.5	94.7	89.2	76.2	66.6	57	74.3
1996	55.9	62.3	65.1	74.1	83	91.9	95.2	94.1	84.3	74.9	64.5	56.5	75.2
1997	55.7	57.8	69.4	70.9	86.3	87.7	93.8	92.9	90	74.7	64.1	52.9	74.7
1998	56.6	54.1	61.9	66.7	76.2	85.4	94.5	94.7	87.9	74.1	62.7	54.4	72.4
1999	56.8	60.3	64.9	65.9	79.8	88.8	91.3	93	87.4	79.3	68	55.2	74.2
2000	58.1	60.9	63.1	75.2	84.8	91	95	92.5	90.3	72.5	56.9	57.3	74.8
2001	54.1	56.9	65.6	71.7	86.9	92	94.4	94.7	92.2	79.4	68.4	53.8	75.9
2002	56	61.3	65.2	76.7	81.7	93.4	96	95.1	89.8	75.1	66.9	55.2	76
2003	62	59.4	64.8	70.3	83.3	91.7	97.7	94.6	90.7	82.7	61.9	56.8	76.3
2004	57.5	55.8	72.3	72.7	83.4	91.2	94.5	92.7	88.1	75.1	61	56	75
2005	57.8	59.2	63.9	72.3	82.7	90.4	97.3	92.2	89.6	78.3	66.3	56.8	75.6
2006	57.7	61.8	62.3	72.7	84.7	94.6	96.5	92.5	85.6	76.1	67.1	54.3	75.5
2007	52.9	59.9	68.7	73.7	84.6	92.7	95.8	96.2	90.3	78.2	70	53.2	76.4
2008	54.7	58.3	66.7	74	78.5	93.2	94.9	92.9	89.9	77.9	67.1	55.8	75.4
2009	58.7	60.7	67.5	71.4	86.2	88.7	98.3	95.2	90	74.4	67.4	53.7	76

Alert: At least 2 injured after cars collide at Peoria intersection

WEATHER

[Archives](#) | [Weather News](#)

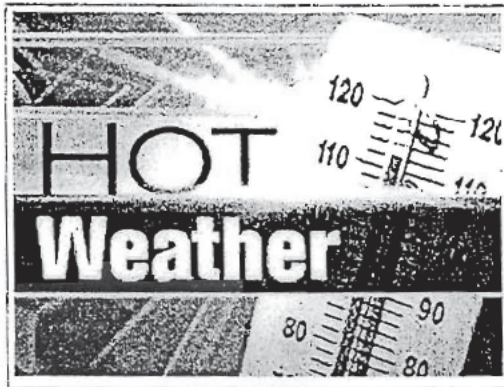


[Share This](#) [Print this Story](#)

May 2009 goes down in record books in several categories



Reported by: [Bill Bellis](#)
Email: bbellis@abc15.com
Last Update: 6/05/2009 9:51 pm



May of 2009 was not just a record breaker of a month, but a different animal compared to last May.

Last month saw 14 consecutive days of 100 degrees or higher which broke the old record of 13 straight days of 100 or higher set back in 1984.

We also tied the record for the total number of days of triple digits at 19 which was also set in May of 1984.

May of 2008 saw only three days of triple digits.

The average high temperature this May was 99 degrees which ended up being the 5th warmest on record in that category. Compare that to last May where the average high was only 91.

The average low temperatures was 74 degrees which goes down as the warmest on record in that category compared to May of 2008 where the low averaged out to 66.

We ended up breaking three daily records for the warmest overnight low temperature. May 2nd - 76; May 19th - 83; May 20th - 84.

The one thing that the last two Mays had in common was rainfall. The average rainfall for May is .16". May of 2008 saw .45" and this May saw .25" which was the 18th wettest on record. Unusual, but we'll take it!

The next three months are forecast to be somewhat drier and warmer than average. So far June is off to a dry start and there is no indication of any monsoon moisture coming up from Mexico.

One other thing to keep in mind is that the Eastern Pacific hurricane season is expected to be below average in the number of storms. This could lead to a drier than average monsoon since a lot of our moisture surges north as tropical systems enter the Baja.

Copyright 2009 The E.W. Scripps Co. All rights reserved. This material may not be published, broadcast, rewritten, or redistributed.

[Share This](#)

[Add a Comment](#) [Add Video Comment](#)

(1) Comments

Weather News

[Despite a warm and dry 2009, the snow pack looks great!](#)

Want to go skiing this weekend? Recent storms have built a healthy snow pack in Arizona.

Alert: At least 2 injured after cars collide at Peoria intersection

WEATHER

[Archives](#) | [Weather News](#)

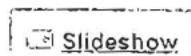
A [A](#) [A](#)

[ShareThis](#) [Print this Story](#)

July of 2009 was the hottest on record!



Reported by: [Bill Bellis](#)
Email: bbellis@abc15.com
Last Update: 8/04/2009 11:47 am



PHOENIX — It's official! July of 2009 was the hottest on record for Phoenix and Yuma when it came to the average temperatures.

The average high temperature ended up at 109.5 degrees ranking second hottest behind July of 1989.

The average low temperature is at 87.1 degrees, ranking it the warmest on record.

If we look at the average temperature, which is the average of the high and low, that number is 98.3, making it the hottest on record.

So why was it so hot? High pressure during the month of July usually likes to sit over the Four Corners area.

Instead, this ridge of high pressure, on average, has been sitting over northern Mexico and southern New Mexico resulting in a more moist air mass at the mid-levels of the atmosphere.

This has been keeping overnight lows much warmer. Therefore the air doesn't have to work as hard to get to 110 or higher.

There has been a persistent trough of low pressure from eastern Canada into the eastern U.S resulting in below average temperatures and abundant rainfall back east.

Places like Detroit, Chicago, Indianapolis, and Marquette are having one of the coolest July's on record.

The slow start to our summer monsoon season is also been a problem.

Only .11" of rain has fallen over the Phoenix area since the Monsoon began.

RELATED: Is there a connection between the monsoon and migraines?

This number is the newly developed Phoenix Rainfall Index which takes an average of 132 rain gauges across the Valley.

With little rainfall, it's tough for the atmosphere to cool.

And to make matters worse, August is off to a blistering start with 4 straight days of Excessive Heat Warnings and consecutive days of record high temperatures.

The forecast for our monsoon the next week or so is very dim. There is only a slight chance for a thunderstorm through this week with the best chances in the higher terrain north and east of the Valley.

[See our latest forecast, along with the 10-Day Outlook](#)

Copyright 2009 The E.W. Scripps Co. All rights reserved. This material may not be published, broadcast, rewritten, or redistributed.

[ShareThis](#)



United States
Department of
Agriculture

Agricultural
Marketing
Service

1400 Independence Ave, SW
Room 4003, STOP 0268
Washington, DC 20250-0268

October 21, 2008

Joe Smillie
Senior Vice President
Quality Assurance International
9191 Town Centre Drive, Suite 510
San Diego, California 92122

Dear Mr. Smillie:

We have received a complaint alleging that Quality Assurance International (QAI)-certified Shamrock Farms Dairy Division is violating 7 CFR 205.237(a); 205.238(a)(3) and (4); and 205.239(a)(1) and (2) and (b)(1)(2)(3) and (4).

We are requesting that you please investigate this issue and respond to us with your findings by November 27, 2008; also, if applicable, please provide us a description of corrective action and timeline for implementation.

Should you have any questions regarding this matter, you may contact Ruihong Guo at 202-720-3252 or Ruihong.Guo@usda.gov.

Sincerely,

Barbara C. Robinson
Acting Director
National Organic Program

cc: NOPC-003-09



United States
Department of
Agriculture

Agricultural
Marketing
Service

1400 Independence Ave, SW
Room 4003, STOP 0268
Washington, DC 20250-0268

October 21, 2008

Joe Smillie
Senior Vice President
Quality Assurance International
9191 Town Centre Drive, Suite 510
San Diego, California 92122

Dear Mr. Smillie:

We have received a complaint alleging that Quality Assurance International (QAI)-certified Shamrock Farms Dairy Division is violating 7 CFR 205.237(a); 205.238(a)(3) and (4); and 205.239(a)(1) and (2) and (b)(1)(2)(3) and (4).

We are requesting that you please investigate this issue and respond to us with your findings by November 27, 2008; also, if applicable, please provide us a description of corrective action and timeline for implementation.

Should you have any questions regarding this matter, you may contact Ruihong Guo at 202-720-3252 or Ruihong.Guo@usda.gov.

Sincerely,

A handwritten signature in dark ink, appearing to read "Barbara C. Robinson", written over a horizontal line.

Barbara C. Robinson
Acting Director
National Organic Program

cc: NOPC-003-09



United States
Department of
Agriculture

Agricultural
Marketing
Service

1400 Independence Ave, SW
Room 4003, STOP 0268
Washington, DC 20250-0268

October 28, 2008

Will Fantle
Director of Research
Cornucopia Institute
P.O. Box 126
Cornucopia, Wisconsin 54827
Telephone: 608.625.2042

Dear Mr. Fantle:

We have received your complaint alleging that Quality Assurance International (QAI)-certified Shamrock Farms Dairy Division is violating 7 CFR 205.237(a); 205.238(a)(3) and (4); and 205.239(a)(1) and (2) and (b)(1)(2)(3) and (4).

You raised multiple issues in your complaint. Please summarize them concisely in a list format so that we can capture all your concerns accurately. Also, please clarify your statement, "...investigate whether or not the organic label may be used in the branded dairy products produced and marketed by Shamrock Farms."

Additionally, you indicated in your complaint that you are willing to share all factual evidence that you have directly gathered from your site visit. Please forward copies of all such evidence to our office.

Attention: Valerie Schmale
Compliance & Enforcement Branch
1400 Independence Ave., SW
STOP 0268, Room 4003-S
Washington, D.C. 20250-0268

Should you have any questions regarding this matter, you may contact me at 202-720-3252 or Ruihong.Guo@usda.gov.

Sincerely,

A handwritten signature in blue ink that reads "Ruihong Guo".

Ruihong Guo, Ph.D.
Chief, Compliance & Enforcement Branch
National Organic Program

cc: NOPC-003-09

Schmale, Valerie

From: Guo, Ruihong
Sent: Wednesday, November 05, 2008 8:30 AM
To: kastel@cornucopia.org
Cc: wfantle@cornucopia.org%inter2; Schmale, Valerie
Subject: RE: Shamrock/Rockview investigations

Mr. Kastel:

We look forward to hearing from you.

Thanks,
Ruihong Guo

P.S. I am a "Ms" ☺

From: kastel@cornucopia.org [mailto:kastel@cornucopia.org]
Sent: Monday, November 03, 2008 4:41 PM
To: Guo, Ruihong
Cc: wfantle@cornucopia.org%inter2
Subject: Shamrock/Rockview investigations

Dear Mr. Ruihong,

I wanted to confirm our receipt of your correspondence dated October 28 and request for materials relating to our legal complaints concerning Rockview and Shamrock.

I am just back from an extended trip to the Pacific Northwest and leave this week for Northern California. Unfortunately, I will not be able to put together any of these materials until I return.

Either while I am on the road, or after I get back, I will give you a call to touch base so I can outline the type of material I have and mutually decide on the best way to get it to you.

In the one of our 11 complaints that was fully adjudicated (most were closed with no investigation taking place whatsoever) AMS compliance staff met with us to take sworn statements in addition to picking up documents. We would be most open to meeting with you or other compliance officers in that regard.

Sincerely yours,

Mark A. Kastel
Codirector
The Cornucopia Institute

Mark A. Kastel
The Cornucopia Institute
kastel@cornucopia.org
608-625-2042 Voice
866-861-2214 Fax



CORNUCOPIA
I N S T I T U T E

P.O. Box 126
Cornucopia, Wisconsin 54827
www.cornucopia.org



9191 Towne Centre Drive, Suite 510
San Diego, CA 92122 • USA
858-792-3531 • Fax: 858-792-8665
www.qai-inc.com

November 7, 2008

Ruihong Guo
United States Department of Agriculture
Agricultural Marketing Service
1400 Independence Ave., S.W.
Room 4003, STOP 0268
Washington, DC 20250-0268

Re: NOPC-003-09

Dear Ms. Guo,

On October 24, 2008 QAI received a letter from the USDA dated October 21, 2008 regarding the QAI Certified operation Shamrock Farms. The letter outlines allegations that Shamrock Farms is violating 7 CFR 205.237(a); 205.238(a)(3) and (4); and 205.239(a)(1) and (2); and (b)(1)(2)(3) and (4).

Shamrock Farms is currently going through their annual renewal process. Upon receipt of their complete renewal documentation QAI will schedule their annual inspection and conduct a full investigation into the complaints received. QAI has contacted Shamrock Farms and have asked them to submit their renewal as soon as possible as to expedite the inspection process. Shamrock Farms has an anniversary date of March 27, 2009.

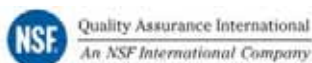
Shamrock Farms was inspected on April 1, 2008, after review of that inspection report there was no indication that there was any questions as to the organic integrity of this operation. However, QAI takes all such allegation seriously. Upon completion of the inspection we will review the report at QAI and if warranted issue notice of non-compliance, proposed suspension and/or proposed revocation. QAI will provide the USDA with the full findings of our investigation. If the full investigation is not completed by January 30, 2009, QAI will submit an update to the USDA on the current progress.

I hope this letter fulfills all your questions at this time. Please note that this contains confidential and proprietary information that should not be communicated to any third party, including but not limited to the original complainant to the USDA. Please let me know if you require any additional information.

Regards,

Maria DeVincenzo
Quality Specialist

Cc: Barbara Robinson





9191 Towne Centre Drive, Suite 510
San Diego, CA 92122 • USA
858-792-3531 • Fax: 858-792-8665
www.qai-inc.com

November 26, 2008

Barbara C. Robinson
Acting Director
National Organic Program
Room 4008, STOP 0268
1400 Independence Ave., S.W.
Washington, DC 20250-0268

Re: NOPC-003-09

Dear Barbara,

We have conducted an investigation into the allegations of violations of 7 CFR 205.237(a); 205.238 (a)(3) and (4); and 205.239(a)(1) and (2) and (b)(1)(2)(3) and (4) against Shamrock Farms on November 19 and 20, 2008. A report was submitted to QAI on November 25, 2008 by (b)(6)

After an initial review of the investigation report reviewed on November 26, 2008 the attached non-compliance letter will be finalized and issued to Shamrock Farms on Monday, December 1, 2008. Upon responses received from Shamrock Farms to their non-compliances QAI will submit a full report.

Please note that this letter and attachments contain confidential and proprietary information that should not be communicated to any third party, including but not limited to the original unnamed complainant to the USDA.

Please let me know if you need any additional information.

Sincerely, (b)(6)

Maria Devincenzo
Quality Specialist

Cc: Ruihong Quo

Attachments: Draft copy of Non-compliance letter to be issued to Shamrock Farms



Quality Assurance International
An NSF International Company

Global Leader in Organic Certification Services • Operations: US • Canada • Japan • Latin America • European Union

DRAFT

Mr. Jim Whitehurst
Shamrock Farms Co.
P.O. Box 280
Stanfield, AZ 85272
USA

Dear Jim;

As part of your obligation for ongoing participation in the QAI Organic Certification Program, the Certification Department has asked us to convey to you that your program will require the following corrective action and/or improvement. Please address each item within the noted time frame.

Within Fifteen Days

Before QAI is able to proceed with the evaluation of your organic certification, the deficiencies identified below must be addressed. Please provide information about how you will correct **each** deficiency, or documentation that it has been corrected, within **Fifteen Days (15 days)** of receipt of this letter. Alternatively, you may provide additional information to demonstrate that your operation complies with the referenced section of the National Organic Program:

1. Please forward organic certification documentation that was issued within the past 18 months for the following feed ingredients.
 - (b) (4) The certificate on file is dated (b) (4)
7 CFR Part 205.103(b)(4), 205.301
2. It was noted that (b)(4) aborted a calf on 8/6/08, approximately 6 weeks prior to the end of the heifer's 12-month transition period, and that this animal was placed into the organic milking string instead of being sent to the conventional dairy as directed by Shamrock's Standard Operating Procedures. While the inspector noted that this was an isolated event, please provide your updated procedures that will be implemented to ensure this error does not occur in future.
7 CFR Part 205.236(a)(2)
3. An audit trail must be in place to ensure that all activities and transactions are disclosed in sufficient detail as to be readily understood and audited. During your inspection, the following record keeping deficiencies were noted:
 - The sample audit conducted by the inspector revealed discrepancies between the (b)(4) reports and the calculated inventory. In addition, invoices from (b)(4) were difficult to match with the list of weight tickets. Containers and large trucks sometimes can't be weighed because the (b) (4) is in the way of the truck. Furthermore, the (b)(4) invoices are very late and then get filed away in other months. The inspector notes that Shamrock Farms plans to start using (b) (4)
(b) (4)

(b) (4) Please describe how the (b) (4) will address record keeping deficiencies, and provide the timeframe for implementation.

- It was stated that the (b) (4) but documentation of treatment was not on file at inspection so its use could not be verified. Please provide a sample of records maintained to record the use of treatments.

7 CFR Part 205.103(b)(2)

4. The inspector noted that for the 2008 winter, the (b) (4) acres of pasture on (b)(4) was the extent of available land for pasture. Please provide your written plan to provide adequate pasture for your organic livestock. The plan must include acreage, forage description, the timing of the cropping cycles such that there will always be ground available for grazing, animal numbers, and the duration/frequency of their stay on the pasture as well as an assessment of the pasture's ability to provide substantive nutritive value to the animals pastured.

7 CFR Part 205.239(a)(2)

5. The inspector noted that prior to milking, the lines are flushed with water and a pH test is taken periodically to verify that the acid sanitizer was completely removed. However, the pH of the fresh water was measured at 8.2 and the well log originally shows 8.5 but the rinse water, following use of the acid sanitizer, is tested with a pH paper to verify the water at pH 6. This implies that the acid sanitizer is still present on equipment prior to handling organic milk. Please provide a written description of the measures in place to protect organic milk from contamination by (b)(4) sanitizer. Please also provide samples of the documents (e.g. *SSOPs, logs, checklists, etc.*) kept to record these measures.

7 CFR Part 205.272(a)

6. The inspector notes that there is no record maintained of the harvest equipment cleaning, including the silage chopper or balers. It is further noted that the baler generally contains a partial bale which needs to be ejected and the equipment blown out.

- a. Please provide a list of contracted equipment that is or will be used for the organic fields (including contracted equipment that will be used for the 2009 crop season).
- b. Please explain your procedure for cleaning out equipment used for both organic and non-organic fields/crops and the cleaning materials used.
- c. Provide a copy of the cleaning log that will be used to document the cleaning of equipment prior to use on organic fields/crops.

7 CFR Part 205.201(a)(5), 205.272(a)

Prior to Annual Monitoring Date

Please include a **written response** to **each** item listed below when you submit next year's application for continuation of certification:

7. Please be advised that your organic compliance plan must accurately describe the practices and materials used at your organic operation. The following discrepancies were noted with regards to your Organic Compliance Plans and the Addendum Materials List:

- Dairy Organic Compliance Plan:

- a. During the tour of the heifer facility (b) (4), the inspector observed that several animals were seen with (b) (4). These are calves that were born from organic mothers that will never be chosen for organic cows because that would constitute moving an animal out of organic and then back in. Please provide a brief description of this (b) (4) as an addendum to your organic compliance plan.
- b. The Daily Ration for Lactating Cows document lists (b) (4). It was explained at inspection that this is actually the (b) (4) additive. Please update the Daily Ration for Lactating Cows document and submit the update to QAI.
- c. The IFRs for Milk Cow lists (b) (4) however, this product is not approved by OMRI. At inspection, the inspector confirmed that this was a typo and is actually (b) (4). Please update the IFR and submit the update to QAI.

- Producer Organic Compliance Plan:

- a. The OCP states that inputs (b) (4)
(b) (4)
(b) (4). Please update section D6 of the Producer OCP and submit the update to QAI.

- b. The inspector notes that only (b) (4)
(b) (4). Please update the Annual Input Record accordingly.

- Addendum Materials List: Please list your cleaners and sanitizers used in the dairy on this form, section 3, and submit it to QAI. Provide a product label for each cleaner/sanitizer in use.

Please submit the updated pages of the Organic Compliance Plan and Addendum as referenced above. Alternatively, you may confirm in writing that the specific changes can be made by QAI staff as appropriate.

7 CFR Part 205.201

DRAFT

Client Advisory

- Please note that the additional fields (b)(4) mentioned by the inspector that will be eligible for organic use in (b)(4) will need to be added to your certificate before they can be used for harvesting organic products. Please:
- complete the attached Individual Field Profile sheet for each field,
 - include a complete plot map for QAI to review,
 - provide a complete 3-year land use history, and
 - complete the attached land use affidavit.
- 7CFR Part 205.201 (a)(6), 7 CFR Part 205.403 (b)*
- All materials used and practices employed on your organic operations must be included in your organic plan and reviewed and agreed upon by QAI prior. It was noted that while you rely on the National List and the OMRI list, QAI has not been used as a resource for approving materials and treatment protocols. Please ensure to notify QAI of all materials you wish to use and practices that you plan to employ so that QAI can assess them according to the NOP and update your file.
- 7 CFR Part 205.400(f)(2)*

We at QAI appreciate your effort and dedication to the organic process and look forward to continuing to work together. **Deficiencies requiring correction within 15 days must be addressed before we can resume consideration of your certification. If an adequate response is not received within the specified time, we will assume you no longer wish to be certified by QAI, and a Notice of Proposed Suspension of your certification will be sent to the National Organic Program.** Responses must be sent to the corporate office in San Diego via a delivery service that provides dated return receipts.

If you have any questions, or require any assistance, please contact me by phone at (858) 792-3531 or fax at (734) 827-3877.

Sincerely,

Natalie Velazquez
Certification Project Manager

Cc: National Organic Program Administrator
(b)(6) Inspector

From: [DeVincenzo, Maria](#)
To: [Schmale, Valerie](#)
Cc: [Guo, Ruihong](#)
Subject: Conference call request
Date: Thursday, February 25, 2010 2:56:56 PM

Hi Valerie,

We were wondering if you and Ruihong would be available for another conference call? Early tomorrow or Monday morning, we would like to go over QAI's proposed settlement agreement to Shamrock.

I look forward to your response. Thanks so much.

Maria DeVincenzo
Quality Specialist
Quality Assurance International
9191 Towne Centre Drive, Suite 510
San Diego, CA 92122 USA
(858) 200-9727 Phone
(734) 827-6177 Fax
www.qai-inc.com



please don't print this e-mail unless you really need to

From: [Schmale, Valerie](#)
To: [Joe Smillie \(jsmillie@qai-inc.com\)](mailto:jsmillie@qai-inc.com)
Cc: [Guo, Ruihong](#); [Schmale, Valerie](#)
Subject: Shamrock Farms Dairy - Investigation
Date: Wednesday, October 22, 2008 1:21:40 PM
Attachments: [Schmale Valerie.vcf](#)
[Shamrock Dairy-QAI.pdf](#)
[image002.jpg](#)
Importance: High

Dear Joe Smillie:

Please find attached a .pdf copy of a letter you will be receiving via Fed Ex. The letter is regarding Shamrock Farms Dairy.

Thanks,
Val



Review of Inspector Report Dated November 12, 2008.

(b)(4),(b)(5)



From: [DeVincenzo, Maria](#)
To: [Schmale, Valerie](#)
Subject: RE: Shamrock unannounced inspection report
Date: Monday, January 04, 2010 12:47:39 PM

You are welcome

Maria DeVincenzo
Quality Specialist
Quality Assurance International
9191 Towne Centre Drive, Suite 510
San Diego, CA 92122 USA
(858) 200-9727 Phone
(734) 827-6177 Fax
www.qai-inc.com



please don't print this e-mail unless you really need to

From: Schmale, Valerie [mailto:Valerie.Schmale@ams.usda.gov]
Sent: Monday, January 04, 2010 9:38 AM
To: DeVincenzo, Maria
Subject: RE: Shamrock unannounced inspection report

Thanks Maria!

From: DeVincenzo, Maria [mailto:Maria@qai-inc.com]
Sent: Monday, January 04, 2010 12:23 PM
To: Schmale, Valerie
Subject: Shamrock unannounced inspection report

Hi Valerie,

Here is the complete inspection report and attachments.

I am sending some photos in a separate email

Regards,

Maria DeVincenzo
Quality Specialist
Quality Assurance International
9191 Towne Centre Drive, Suite 510
San Diego, CA 92122 USA
(858) 200-9727 Phone
(734) 827-6177 Fax
www.qai-inc.com



please don't print this e-mail unless you really need to

From: [Schmale, Valerie](#)
To: ["DeVincenzo, Maria"](#)
Subject: RE: Shamrock Farms Dairy
Date: Wednesday, December 23, 2009 2:25:12 PM
Attachments: [image001.jpg](#)
Importance: High

Hi Maria,

I am writing to see if a copy of the inspector's report and attachments could be forwarded to me from the December 15, 2009 unannounced inspection?

I hope you have a wonderful holiday and a Happy New Year.

**Thanks,
Val**

From: DeVincenzo, Maria [mailto:Maria@qai-inc.com]
Sent: Monday, December 14, 2009 1:40 PM
To: Schmale, Valerie
Subject: RE: Shamrock Farms Dairy

Hi Valerie,

I hope that you had a nice weekend.

I just wanted to inform you that QAI has assigned an inspector to do an unannounced inspection of Shamrock Farms, the inspection is scheduled to be performed tomorrow, December 15, 2009.

Regards,

**Maria DeVincenzo
Quality Specialist
Quality Assurance International
9191 Towne Centre Drive, Suite 510
San Diego, CA 92122 USA
(858) 200-9727 Phone
(734) 827-6177 Fax
www.qai-inc.com**



please don't print this e-mail unless you really need to

From: Schmale, Valerie [mailto:Valerie.Schmale@ams.usda.gov]
Sent: Friday, December 11, 2009 7:53 AM
To: DeVincenzo, Maria
Cc: Schmale, Valerie
Subject: RE: Shamrock Farms Dairy
Importance: High

Hi Maria,

We've reviewed and discussed the file from QAI regarding Shamrock Farms. QAI performed an inspection in November 2008 as a result of the complaint that was filed by Cornucopia on October 14, 2008. The NOP recommends that QAI perform an unannounced inspection of Shamrock Farms immediately. NOP believes it is beneficial to know if Shamrock Farms is providing the organic herd access to pasture when they do not know an inspector is coming to review their practices. An unannounced inspection would strengthen QAI's case that Shamrock has not violated the regulations as alleged by Cornucopia.

Sincerely,
Val Schmale

From: DeVincenzo, Maria [mailto:Maria@qai-inc.com]
Sent: Wednesday, December 09, 2009 6:40 PM
To: Schmale, Valerie
Subject: RE: Shamrock Farms Dairy

Hi Valerie,

Please see my responses to your questions below.

Regards,

Maria DeVincenzo
Quality Specialist
Quality Assurance International
9191 Towne Centre Drive, Suite 510
San Diego, CA 92122 USA
(858) 200-9727 Phone
(734) 827-6177 Fax
www.qai-inc.com



please don't print this e-mail unless you really need to

From: Schmale, Valerie [mailto:Valerie.Schmale@ams.usda.gov]
Sent: Wednesday, December 09, 2009 11:40 AM
To: DeVincenzo, Maria
Subject: Shamrock Farms Dairy
Importance: High

Maria,

Good afternoon. I have a few more questions for you Maria regarding this case.

1. I need to know if QAI performed any announced or unannounced inspections at Shamrock Farms Dairy in 2009.

No, there has not been an inspection in 2009. Shamrock Farms is just starting to go through the renewal process for the upcoming year, their Annual Monitoring Date is 3/27/10, an inspection will be scheduled when the renewal process is complete.

2. Also has QAI ever performed any unannounced inspections at this farm?

No. Shamrock Farms was issued their first certificate on March 2, 2007, they have had only announced inspections, February 2007, January 2008 and November 2008.

3. What is the transition date (date the land can be certified organic) for (b)(4) [REDACTED] [REDACTED]?

(b)(4) [REDACTED] was added to the certificate on January 2, 2009. The date last prohibited material was added to the field was June 2005, therefore the date that land could have been certified was June 2008.

4. Are (b)(4) [REDACTED] in transition or have they been certified organic – it was not clear from the paperwork I received.

5. If they are in transition, when is their available date for organic certification?

According to our records (b)(4) [REDACTED] could have been certified Autumn 2009. They have not been certified at this time.

Thank you for your assistance with this information.

Val



From: [Guo, Ruihong](#)
To: [Schmale, Valerie](#)
Subject: can we meet quickly on Shamrock?
Date: Friday, May 14, 2010 10:47:25 AM

Ruihong Guo
Director
Compliance & Enforcement Division
National Organic Program
United States Department of Agriculture

From: [Schmale, Valerie](#)
To: ["DeVincenzo, Maria"](#)
Subject: RE: Shamrock Farms attachment-
Date: Tuesday, June 30, 2009 2:11:12 PM

Received 😊

From: DeVincenzo, Maria [mailto:Maria@qai-inc.com]
Sent: Tuesday, June 30, 2009 2:01 PM
To: Schmale, Valerie
Subject: Shamrock Farms attachment-

Hi Valerie,

Attached is a copy of the investigative inspection report.

Maria

Maria DeVincenzo
Quality Specialist
Quality Assurance International
9191 Towne Centre Drive, Suite 510
San Diego, CA 92122 USA
(858) 792-3531 Phone
(734) 827-6177 Fax
www.qai-inc.com

Certificate of Compliance

Certified Organic



Number 106205-A

Certified Entity

Shamrock Foods - Dairy Division
2228 N. Black Canyon Highway
Phoenix, AZ 85009
USA

Type of Operation

Handler (Processor)

Location Inspected

Shamrock Foods - Dairy Division
2228 N. Black Canyon Highway
Phoenix, AZ 85009
USA

Effective Date

June 4, 2007

Quality Assurance International, upon providing this certification, states that it has received the Certified Entity's application, reviewed its records, inspected its fields and/or facilities; and has determined that the certified entity identified above is operating in accordance with the Organic Foods Production Act of 1990 and 7 CFR Part 205. In its acceptance of this certification, the certified entity warrants, that it is in, and will remain in, full compliance with the Terms and Conditions of the Certification Agent, and in accordance with general guidelines established by the USDA's National Organic Program.

Certification valid until surrendered, suspended or revoked.



QUALITY ASSURANCE INTERNATIONAL

9191 Towne Centre Drive, Suite 510 • San Diego California, U.S.A. • (858) 792-3531 • Fax: (858) 792-8665



Organic System Plan Summary

Company: Shamrock Foods - Dairy Division
2228 N. Black Canyon Highway
Phoenix, AZ 85009
USA

MASTER

Operation Type: Handler (Processor)

Certification Number: 106205-A

First Certified Date: 6/4/2007

Next Annual Monitoring Date: 5/29/2008

Organic

Category	Product	ID Mark	Compliance	Date Added
----------	---------	---------	------------	------------

(b) (4)

The above information is provided as a description of the organic system under certification. This document does not replace the organic certificate. It is provided as customer service to assist in the representation of the certified organic products.

Authorization

(b)(6)

1/4/2008



October 12, 2008

TO: David Trykowski, NOP Compliance, USDA

RE: Complaint concerning multiple violations of the National Organic Program's regulatory standards by Shamrock Farms headquartered in Phoenix, AZ

Dear Mr Trykowski,

The Cornucopia Institute is filing this formal complaint with your office concerning possible violations of National Organic Program (NOP) regulatory standards governing ruminants (dairy cows) by the Shamrock Farms dairy south of Phoenix, AZ. We are asking that you fully investigate this complaint to determine whether violations of NOP regulatory standards have occurred, are occurring, or will occur.

We are willing to share with your investigators all of the factual evidence we have directly gathered from our site visit to the Shamrock Farms facility. At the conclusion of your investigation, we ask that you take all warranted enforcement actions to bring this dairy operation into compliance with NOP rules in a timely fashion or to decertify and/or fine the operator, if appropriate.

If the allegations we have gathered are proven to have merit, we believe that there is a reasonable basis to conclude that the Shamrock Farms Dairy is violating the following provisions of the NOP regulations:

Subpart C

§ 205.237 Livestock feed.

- (a) The producer of an organic livestock operation must provide livestock with a total feed ration composed of agricultural products, **including pasture** and forage, that are organically produced and, if applicable, organically handled ... (emphasis added)

and

§ 205.238 Livestock health care practice standard

- (a) The producer must establish and maintain preventive livestock health care practices, including:
 - (3) Establishment of appropriate housing, pasture conditions, and sanitation practices to minimize the occurrence and spread of diseases and parasites;

(4) Provision of conditions which allow for exercise, freedom of movement, and reduction of stress appropriate to the species;

and

§ 205.239 Livestock living conditions.

(a) The producer of an organic livestock operation must establish and maintain livestock living conditions which accommodate the health and natural behavior of animals, including:

- (1) Access to the outdoors, shade, shelter, exercise areas, fresh air, and direct sunlight suitable to the species, its stage of production, the climate, and the environment;
- (2) Access to pasture for ruminants;

(b) The producer of an organic livestock operation may provide temporary confinement for an animal because of:

- (1) Inclement weather;
- (2) The animal's stage of production;
- (3) Conditions under which the health, safety, or well being of the animal could be jeopardized; or
- (4) Risk to soil or water quality.

Regarding the Shamrock Farms dairy operation, The Cornucopia Institute contends that the feedlot facility does not provide sufficient pasture for their dairy herd numbering approximately 11,000 head, of which 700-1000 are being "managed" organically.

Staff from The Cornucopia Institute visited and directly observed the Shamrock operation in April 2008. Then 100% of the dairy herd was confined to the facility's feedlot and, according to dairy staff, had not been out on their substandard pasture acreage for a matter of weeks. This fails the standard established under NOP regulation **§ 205.239. Terms defined:**

Pasture. Land used for livestock grazing that is managed to provide feed value and maintain or improve soil, water, and vegetative resources.

Stocking levels of 5-10 cows per acre do not meet universally acceptable grazing standards.

The Cornucopia Institute recognizes that certified organic dairy operations can remove cows from pasture for temporary considerations based on weather, environmental, or health considerations, as noted above in **§ 205.239**. The Cornucopia Institute contends, however, that geographic or climatic conditions—which make pasture impractical or not cost-effective—cannot be used to justify year-round noncompliance with the pasture rule.

In addition, The Cornucopia Institute requests that the USDA investigate whether or not the organic label may be used in the branded dairy products produced and marketed by **Shamrock Farms**.

The following criteria stated in the national organic regulations should be used to make this determination:

Subpart D - Labels, Labeling, and Market Information

§ 205.300 Use of the term, "organic."

(a) The term, "organic," may only be used on labels and in labeling of raw or processed agricultural products, including ingredients, that have been produced and handled in accordance with the regulations in this part. The term, "organic," may not be used in a product name to modify a non-organic ingredient in the product.

The Cornucopia Institute requests that the USDA investigate the applicability of this national organic regulation, should it be deemed appropriate:

Subpart B – Applicability

§ 205.100 What has to be certified

(c) Any operation that:

- (1) Knowingly sells or labels a product as organic, except in accordance with the Act, shall be subject to a civil penalty of not more than \$10,000 per violation.
- (2) Makes a false statement under the Act to the Secretary, a governing State official, or an accredited certifying agent shall be subject to the provisions of section 1001 of title 18, United States Code.

And finally, because of past widespread problems discovered by Cornucopia and the USDA at other CAFOs certified to produce organic milk, we strongly encourage the Department to meticulously scrutinize all documentation and practices related to the origin of livestock.

The Shamrock Farms dairy plant has been most recently certified by Quality Assurance International, and their contact information is:

9191 Towne Centre Dr., Suite 510
San Diego, CA 92122
Contact: Joe Smillie
Phone: 858-792-3531
E-mail: qai@qai-inc.com

It is unclear who has organic certification responsibility for the livestock. Neither information provided by the National Organic Program or the Shamrock Farms web page provide the level of transparency permitting the ability to discern this fact.

Contact information for the Shamrock Farms dairy is:

Shamrock Farms Dairy Division
2228 N. Black Canyon Hwy.
Phoenix, AZ 85009
(602) 272-6721

Please keep The Cornucopia Institute apprised of the status of and progress of your investigation into this formal complaint. We take this matter very seriously. Farmers who have made the difficult conversion to organics and consumers who are paying premium prices for organic foods rely upon the USDA and its approved certifying agents to uniformly and fairly enforce the nation's organic law.

Lastly, pursuant to **Subpart C** and the following provision:

§ 205.680 General

- (a) Persons subject to the Act who believe they are adversely affected by a noncompliance decision of the National Organic Program's Program Manager may appeal such decision to the Administrator.

The Cornucopia Institute requests that the USDA's Office of Compliance make a timely, full, and good faith effort in their investigation of these allegations. We do not convey these allegations frivolously—they are a serious matter. And while the Institute lacks specific investigative powers possessed by the USDA (the ability to take sworn testimony, access certification documents, or subpoena relevant material), we expect the USDA to take these allegations seriously and conduct a meaningful investigation.

In fact, failure to take such action will only encourage future scofflaws and corner cutting by organic operators, and will make a mockery of the federal organic regulations that are so diligently observed by the vast majority of participants in the nation's organic agriculture and food sector.

It should be noted that nothing in this formal complaint shall be interpreted as a waiver of our right to appeal under the Adverse Action Appeals Process cited above.

You may contact us at your convenience.

Sincerely,

(b)(6)

Will Fantle
Director of Research
715-839-7731
wfantle@cornucopia.org























From: [Schmale, Valerie](#)
To: [Guo, Ruihong](#)
Subject: shamrock
Date: Wednesday, June 16, 2010 8:43:01 AM
Attachments: [Schmale Valerie.vcf](#)
[020510 Letter to Shamrock Farms.pdf](#)
[image002.jpg](#)

Here's a letter Maria sent giving them the final date of suspension.



From: [DeVincenzo, Maria](#)
To: [Schmale, Valerie](#)
Subject: RE: Shamrock Farms - report
Date: Wednesday, August 05, 2009 4:22:00 PM
Attachments: [Shamrock Farms 112008 Inspec Report attachments.pdf](#)
[Shamrock Farm inspector photos 112008.pdf](#)

Hi again,

This is the 2nd of 2 emails sent, hopefully you have received both.

Attached are the inspection report attachments and photos.

Please let me know if there is anything else you need.

Thanks.

Maria

Maria DeVincenzo
Quality Specialist
Quality Assurance International
9191 Towne Centre Drive, Suite 510
San Diego, CA 92122 USA
(858) 792-3531 Phone
(734) 827-6177 Fax
www.qai-inc.com

From: Schmale, Valerie [mailto:Valerie.Schmale@ams.usda.gov]
Sent: Wednesday, August 05, 2009 11:46 AM
To: DeVincenzo, Maria
Subject: RE: Shamrock Farms - report

Maria,

In reviewing the report, the attachments for the report itself are missing. Could those attachments be forwarded to me?

Additionally, we do not have a copy of the OSP for Shamrock Dairy. As the report refers back to various sections of the OSP, would it be possible to have that forwarded to us electronically as well? We would also like a copy of the organic certification for Shamrock.

**Thanks,
Val**

From: DeVincenzo, Maria [mailto:Maria@qai-inc.com]
Sent: Tuesday, June 30, 2009 1:59 PM

To: Schmale, Valerie
Subject: Shamrock Farms - report

Valerie,

Attached is the final report from 12/10/08 regarding Shamrock Farms.
The attachments will follow in 2 additional emails.

Thanks.

Maria

Maria DeVincenzo
Quality Specialist
Quality Assurance International
9191 Towne Centre Drive, Suite 510
San Diego, CA 92122 USA
(858) 792-3531 Phone
(734) 827-6177 Fax
www.qai-inc.com

From: [Schmale, Valerie](#)
To: Maria@gai-inc.com
Subject: Re: Shamrock Farms NOPC-003-09
Date: Monday, November 10, 2008 11:15:00 AM
Attachments: [Schmale Valerie.vcf](#)
[Shamrock Dairy - QAI re 11 7 08 letter.pdf](#)
[image002.jpg](#)

Dear Maria DeVincenzo:

Please see attached and advance copy of the NOP's response to your letter of November 7, 2008. You will be receiving a copy via Federal Express.

Thanks,
Val

