

A Systems Approach to Nursery Certification





SANC Facility Manual: Building It From Your Risk Assessment

Central Region SANC Training Indianapolis September 25–26 2018 Wayne N. Dixon, NPB – SANC

http://sanc.nationalplantboard.org/

Things To Build Checklist

Risk Assessment

Pest
Management
Plan

Facility SANC Management Policy

Organizational Chart

Staff Responsibilities

Facility Map:

Facility SANC Manua

External and Internal

Pest Management Plan

Audits and Systems Improvements

Records and Documents

Signatures



Key Documents

SANC Standards (H)

Building Your SANC Facility Manual

Examples of Facility Manuals (M)

Star of Roses & Plants/Conard-Pyle (PA)

McKay Nursery Company (WI)

Version date: 4-14-2014



State Level Model Standard:

A Systems Approach to Nursery Certification (SANC)

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SANC Standards

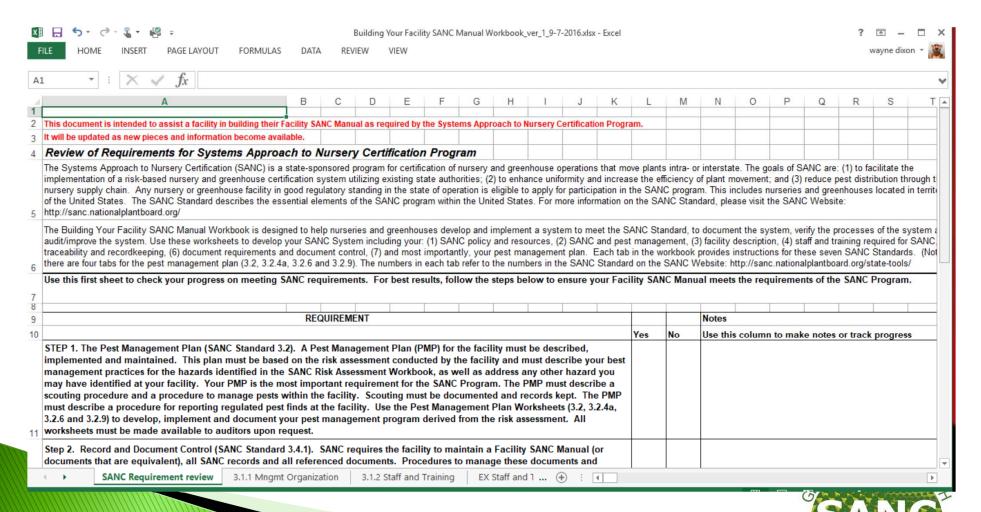
The SANC system components listed below are required and must be described within the Facility SANC Manual or equivalent (Link to Facility SANC Manual Outline), which shall be submitted to the certifying authority. The Facility SANC Manual will describe the requirements, processes, and systems that make up the integrated measures for pest risk management at the facility. It will document processes and procedures used to manage the SANC system and to manage risk of plant pest introduction or spread into or within the facility.

3.1 Staff and Facility

- 3.1.1 Management and Organization. Participating nurseries and greenhouses must define a policy that ensures the integrity of the SANC program and allocates resources to meet the standard. A description of the organizational structure of the facility, and responsibilities of key staff related to the SANC program, must be maintained. Link to staff and training guidelines
- 3.1.2 Staff Training. The facility must develop and describe a training plan for all employees involved in planning or implementing procedures listed in the Facility SANC Manual. The training goals must include a general understanding of the SANC program and the facility's pest management system, as well as specific knowledge related to those components for which each employee has responsibility. For management staff, the training plan should include annual review of the Facility SANC Manual. (Link to staff and training guidelines)
- 3.1.3 Facility Description. A description of the place of production and a description of areas specified in the Pest Management Plan must be maintained.
- 3.2 Pest Management Plan. A Pest Management Plan of the facility must be described and maintained. This plan must be based on the risk assessment conducted by the facility and must include provisions to scout for, document and manage pests within the facility. The plan will define a procedure for reporting regulated pest detections to the certifying authority. (Link to risk assessment and BMP's? PMP outline?)



Building Your SANC Facility Manual

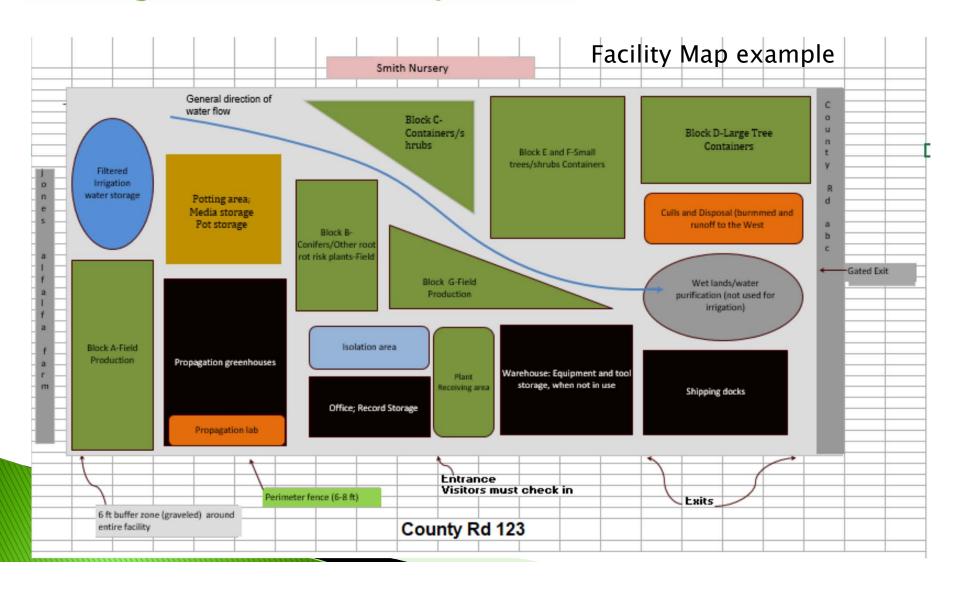


Building Your SANC Facility Manual

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_4	A B C D E F G H I J K	L	M	N	0	P	Q	R	S	Т
7	REQUIREMENT									
8		Yes	No	Use th	is colur	nn to mak	e notes	or track	your pro	gress
9	1.Establish a policy that:									
10	a. Ensures the integrity of the SANC Program.									
11	b. Prevents the risk of the introduction of regulated pests onto the facility									
12	c.Prevents the movement of regulated pests from the facility									
13	d. Minimmzes the movement of all other pests from the facility by practicing pest management									
14	e. Allocates resources (staff/support) to implement and maintain the SANC Program									
15	2. Define how your company will communicate these policies to employees.									
	3. Set up an organizational chart that shows the reporting hiearchy of your facility as it relates to SANC. Or list all positions at your facility and describe their SANC duties and									
16	to whom they report.									
17										
	POLICY EXAMPLE (INCORPORATE YOUR SANC COMMITMENT INTO YOUR CURRENT COMPANY POLI	CY ON PL	ANT QUA	LITY OR I	PEST CON	TROL,WHI	EN POSSIE	BLE): It is	the polic	y of ABC
	Nursery to produce, sell and ship only plants of the highest quality, including those not contamir	ated with	h pests or	pathoge	ens. ABC	Nursery w	ill use acc	eptable i	resources	to
	prevent the introduction of regulated pests into its facility, monitor all aspects of production in o	rder to re	asonably	mitigate	all pests	that may	be introd	uced ont	to its facili	ity, work
	with authorities to contain any regulated pests, train our employees on SANC goals and adhere to	the SAN	C Standaı	rd in ord	er to cer	tify that o	ur plant n	naterial m	neets thes	e
18	standards before shipping to our customer.									
4	SANC Requirement review 3.1.1 Mngmt Organization 3.1.2 Staff and Training EX Staff	and 1	+ : •							



Building Your SANC Facility Manual



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Facility SANC Manual Example



Systems Approach To Nursery Certification (SANC)

Facility Manual





Facility SANC Management Policy

General Policy Statement: grow, sell and ship plants of the highest quality and free of pests

Pest Management Plan developed and based on Critical Control Points and Best Management Practices

Document and Records System in place to meet SANC Standards

Internal Audits are proscribed and conducted regularly

SANC-related job/position duties are defined and written



Facility SANC Management Policy

Staff and Facility

Systems Approach To Nursery Certification (SANC) Management Policy for Star* Roses and Plants/Conard-Pyle, West Grove, PA

It is the policy of Star" Roses and Plants/Conard-Pyle to sell and ship only plants of the highest quality standards and to be free of injurious pests and diseases. The company has put into place documented procedures that monitor all aspects of plant production and growing in order to reasonably mitigate the transmission of regulated pests or pathogens to or from our facility and throughout all nursery operations. Star" Roses and Plants/Conard-Pyle will continuously improve our internal procedures and to work with the authorities to contain any regulated pests. The company will adhere to the SANC Standard to certify shipments of our products to our customers.

A Pest Management Plan for the facility and its operations has been developed and is maintained. This plan is based on the risk assessment conducted, and the identification of critical control points. Best Management Practices (BMP's) were used that defined how to best mitigate those risks and includes provisions for scouting, documenting and managing the potential risk for plant pest introduction or spread into or within the facility.

A document and records system has been developed to ensure that processes and procedures are consistent, are being utilized and that plants certified meet the requirements of the SANC Standard. To control the traceability of plant material, records are maintained and documentation is available from when and how sourcing material is received, put into inventory, and up until shipping to our customers. These records are made available to the state certifying agency upon request and are maintained according to requirements.

Star* Roses and Plants/Conard-Pyle has defined and written SANC duties into all job descriptions with SANC responsibilities. The company maintains training and orientation records for all employees as necessary to meet SANC requirements. Internal and external systems audits are in place for the SANC program; these audits verify that our systems are functioning properly and serve to identify situations that may indicate needed changes to the pest management plan document, and to document process improvements through corrective actions.

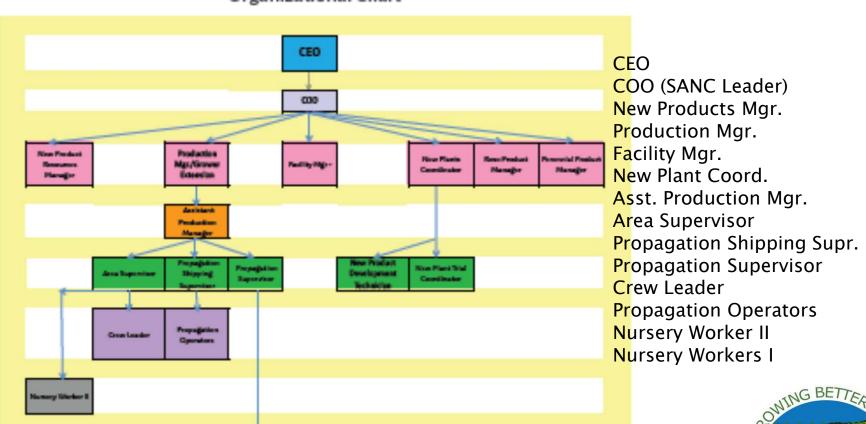


Organizational Chart

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Staff and Facility

Organizational Chart



Organizational Chart

Job Title	SANC Responsibility		
coo	SANC Program Manager		
Production Manager	Manages Pest Management Plan		
	Maintains Audit Records		
	Maintains Risk Assessment		
	Maintains Compliance Agreements and Regulatory Documents		
	Scouting		
	Chemical Applications		
Assistant Production Manager	Scouting		
	Chemical Applications		
Propagation Supervisor	Scouting		
	Chemical Applications		
New Product Development Tech	Lead Scout		
	Maintains Diagnostic Reports		
Shipping Supervisor	Scouting		



Staff Responsibilities

Position	SANC Responsibilities	Qualifications / Training	Continuous
SANC Program Manager CP Chief Operating Officer	Has been assigned the authority and accountability to develop and implement the SANC management system that meets the SANC requirements	Attends NPB SANC Meetings	Meets with appropriate authorities on a regular basis
	Responsible for assuring that the SANC requirements are carried out throughout the entire operation	Has a working knowledge about Systems Approaches	SANC Participation
	Ensures SANC compliance through the Pest Management Pan, internal audits, and program recordkeeping of the facility	Is an officer of the company	Auditing and review of SANC manual and continuous improvement system
	Ensures that employees with SANC responsibilities have the necessary expertise in performing those tasks and are adequately trained		
	Communicates to the certifying authority any reportable non-conformance and or manual changes.		
	Responsible for managing the SANC Facility Manual		



Staff Responsibilities

SANC Pest Scout CP New Product Development Tech	Scouts crops on a regular basis in all growing areas and maintains copies of scouting reports		
	Communicates pest and pathogen findings with indication of pest pressure to all departments	Attends industry events to stay current on updated BMP's	
	Scouts treated areas to monitor efficacy	Has a working knowledge of pest detection procedures, entomology, plant pathology and weed management	
	Recommends re-treatment if necessary	Has a working knowledge of the SANC Program Requirements and receives in house training by Production Manager on SANC requirements related to Scouting	
	Is trained in conducting internal audits		
	Send suspected virus samples to approved labs for virus panel tests		



Facility Map - External and Internal

External Facility Map





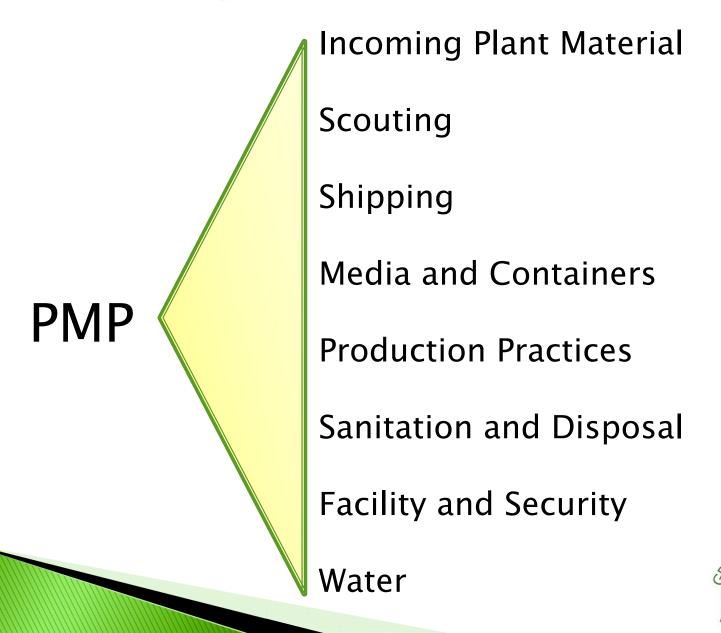
Facility Map - External and Internal

Staff and Facility

Internal Facility Map







Pest Management Plan

Systems Approach To Nursery Certification (SANC)

Pest Management Plan

for Star® Roses and Plants/Conard-Pyle, West Grove, PA

Incoming Plant Material

- All plants coming into the greenhouse are received on the loading dock. Once at the dock all plants are inspected by the Production Manager. PM conducts a visual inspection of roots, media and foliage utilizing a hand lens.
- All material grown at internal locations outside of the greenhouse structure follows the incoming plant material
 procedures.
- If pests are identified, plants are isolated and corrective treatment is assigned. Plants are inspected again by PM
 to measure efficacy of treatment.
- If treatment is successful plants are released into greenhouse, if treatment is not successful corrective action is assigned.
- Plants are received on racks marked "new arrival."
- · After successful treatment, sign is changed to "okay to move" and then product is moved into inventory.
- If pathogen is not identified, a sample plant is sent to a reputable lab for identification. Any plants remaining
 from this group are isolated in head house area until lab results are returned. Corrective action is assigned after
 pathogen is identified.
- · Upon confirmation of finding a regulated pest/pathogen PM will contact PA Dept of Ag. To report finding.
- If plants are received from an international delivery all applicable APHIS regulations are followed. Inspections by PA Department of Agriculture used to confirm compliance with permit regulations.



Scouting

- Scouting is performed in all growing zones on a regular basis. Scouting is done by IPM scout (this responsibility is
 part of the New Product Development Technician and the Assistant Production Manager). Findings are published
 and distributed via email. PM reviews report and walks with IPM scout to review findings. PM assigns corrective
 action. PM scouts treated areas to monitor efficacy. Re-treatment is assigned as necessary.
- If suspected virus is found, sample plant is sent to a reputable lab for virus panel test. Upon receipt of lab results
 plants are either discarded or cleared for movement into growing zones.
- Scouting reports are managed electronically by the Production Manager.
- Sticky cards are used in zone 3 and BGH to monitor pest and beneficial populations.
- Monitor pH and EC levels in container media on a regular basis.
- Beneficial insects, mites and nematodes are applied on a regular basis during the growing season to suppress
 Thrips, Aphids, Shore Fly, Fungus gnats and mites.
- · Fungicides are applied on a regular schedule to suppress the growth of fungal pathogens in all growing zones.
- Pesticide application records are maintained by the Production Manager according to federal and state requirements.



Water

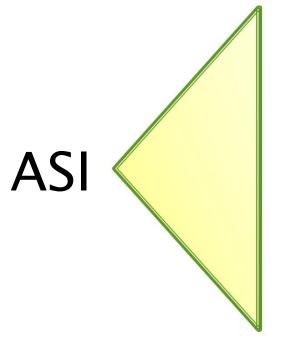
- Water is provided from deep wells and pumped into cisterns in pump room. Well water is sampled from the pump
 room and sent to an approved lab for pathogen and quality testing. Samples are sent in on a regular basis.
- Hose ends are kept off the floor in all growing zones.
- Watering in all growing zones is executed daily to give the most efficient drying time possible.

Sanitation and Disposal

- All tables in zone 3 are disinfected in between crops.
- Floors in zone 3 and Breeding Greenhouse are disinfected on regular basis during the year.
- Weeding and grading of plant material in all growing zones is done on a regularly scheduled basis during the year.
 Any culls are discarded in dumpster and reported to inventory.
- A small portable dumpster is used to move culls from growing zone to outside dumpster.
- Trash cans are provided in all growing zones, each can has a tight fitting lid that is kept in place at all times.
- Hose ends are kept off the floor in all growing zones.
- All tables in zone 3 and Breeding Greenhouse are disinfected on a regular basis during the year, typically inbetween crop cycles



Audits and Systems Improvements



Overview
Types of Audits
Audit Frequency
Audit Preparation
Audit Initiation and
Steps
Audit Completion



Audits and Systems Improvements

Systems Approach To Nursery Certification (SANC)
Internal Audit and Improvement Systems Procedures
for Star* Roses and Plants/Conard-Pyle, West Grove, PA

Overview

- The standard procedure that will be used to audit and verify conformance to the SANC requirements established in the Program Manual is a series of system and surveillance audits.
- These audits will verify that the systems are functioning properly or to identify situations that may indicate needed changes to the Pest Management Plan

Types of Audits

- Systems audits will be completed to check whether all the main elements of the SANC system are in place. The
 systems audit will focus more attention to how the stated Facility Manual procedures are functioning, for example
 record keeping, staff training, document controls, etc., this audit will verify that the system really works. The
 systems audit maybe completed by internal or external (certifying authority) auditors
- Surveillance Audits are directed to audit a specific part of the SANC process when the process is active; ex. shipping surveillance audit will occur as appropriate



Audits and Systems Improvements

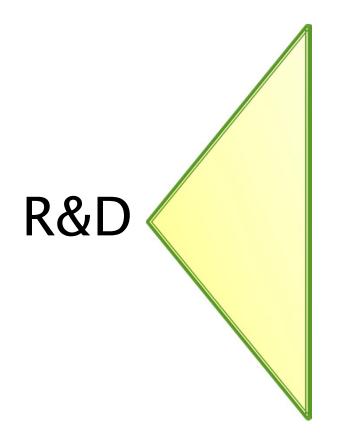
Audit Frequency

- A systems audit of the SANC Facility Manual will be conducted as needed as determined by the Program Manager
- Surveillance audits will be conducted each year, management and the SANC Program Manager will develop a schedule of sufficient internal audits based upon operational activities that encompass the aspects of the annual systems audit

Audit Preparation

- The SANC Program Manager will develop and manage a schedule defining the scope and method
- Actual audits will be conducted by Internal Auditors. Prior to each audit the SANC Program Manager will review with the Internal Auditor, the relevant requirements of SANC in terms of what is being audited, and manage the process
- An Audit Observation Form will be used during the audit.





SANC Facility Manual
Record Control
Incoming Plant Material Records
Outbound Plant Material Records
Pest Management Plan Records
Training and Orientation Records
Internal and External Audit Records
Risk Assessment Records
Compliance Agreements
Certifying Authority



SANC Document Control, Traceability, and Record Keeping Procedure for Star® Roses and Plants/Conard-Pyle, West Grove, PA

SANC Facility Manual and Related Documents

- The official copy of the SANC Facility Manual will be stored electronically
- The Chief Operating Officer of the Company is the SANC Program Manager and is responsible for managing the SANC Facility Manual including
 - Only the SANC Program Manager has editing capabilities of the SANC Facility Manual on the official copy
 - Documenting all changes and communicating changes when applicable to the certifying authority
 - iii. Maintaining revisions and maintaining a revisions log
 - iv. Informing HR Manager of revisions so that HR can update all paper copies and dispose of all obsolete manuals
- c. Paper copies of the SANC Facility Manual are located in the following locations:
 - i. Production Manager's office
 - ii. Employee information area
 - iii. Human Resources (HR) office
- It is the responsibility of the HR Manager to periodically check that the most current version of the manual is available at these locations
- e. All obsolete electronic copies will remain for two years
- Other documents that are used to meet the SANC standard are controlled by the New Product Coordinator



SANC Document Control, Traceability, and Record Keeping Procedure for Star* Roses and Plants/Conard-Pyle, West Grove, PA

1. SANC Facility Manual and Related Documents

- a. The official copy of the SANC Facility Manual will be stored electronically
- The Chief Operating Officer of the Company is the SANC Program Manager and is responsible for managing the SANC Facility Manual including
 - Only the SANC Program Manager has editing capabilities of the SANC Facility Manual on the official copy
 - Documenting all changes and communicating changes when applicable to the certifying authority
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- It is the responsibility of the HR Manager to periodically check that the most current version of the manual is available at these locations
- e. All obsolete electronic copies will remain for two years
- Other documents that are used to meet the SANC standard are controlled by the New Product Coordinator



5. Pest Management Plan Records

- a. The Production Manager maintains the following records
 - i. The Pest Management Plan and scouting reports
 - ii. Chemical Application Records
- b. The New Product Development Technician maintains the following records
 - i. Diagnostic reports

6. Training and Orientation Records

- a. The HR Manager maintains the following records
 - i. Employee duties related to the SANC program
 - ii. Documentation of all employee training related to SANC

7. Internal and External Audit Records

- a. The Production Manager maintains all audit records for the SANC Program
 - i. Audit records are maintained for two years

Risk Assessment Records

- The Production Manager maintains this document and periodically reviews the document for changes in hazards, and critical control points
- All changes to Risk Assessment are reviewed by the Production Manager

9. Compliance Agreements and Regulatory Documents

- The Production Manager maintains and reviews all compliance agreements and regulatory documents for Star® Roses and Plants/Conard-Pyle
- b. Copies of these documents are in the following locations:
 - NPD Office
 - ii. Production Manager Office
 - iii. Production Shipping Office



10. Certifying Authority

a. State Plant Regulatory Official PA Department of Agriculture 2301 N. Cameron St., Harrisburg, PA 17110 Phone: 717.772.5205 | Fax: 717.783.3275 www.agriculture.state.pa.us



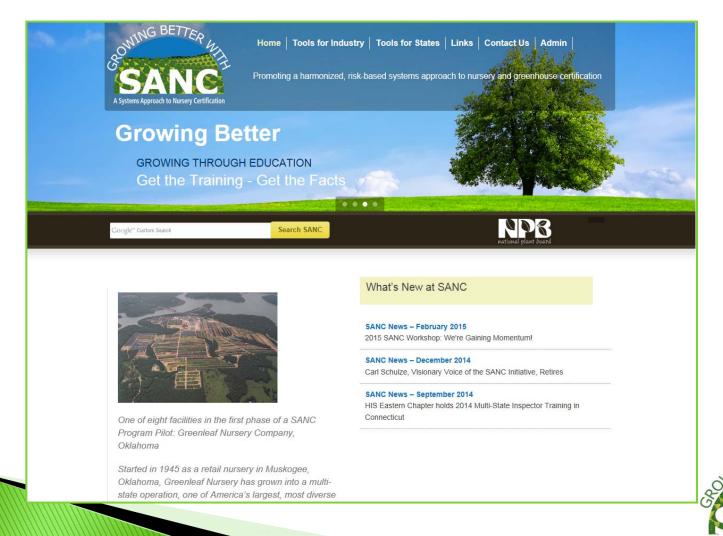
Signatures

Certifying Authority State Regulatory Official PA Department of Agriculture		
Name / Title		
Signature		
Date		
SANC Facility Program Manager		
Name / Title		
Signature		
Date		



For more information:

http://sanc.nationalplantboard.org/



Questions?



A Systems Approach to Nursery Certification

....Promoting a harmonized, risk-based systems approach to nursery and greenhouse certification

