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Date: March 12, 2021

To: All Faculty, Principal Investigators and Staff Using Pesticides

From: Margaret Brennan, Director, Office of Administration and Strategic Development, New Jersey Agricultural Experiment Station (NJAES)
Mark Robson, Professor of Plant Biology
Mark McLane, Executive Director, Rutgers Environmental Health and Safety (REHS)
Maureen Modica, Manager of Environmental Services, REHS

Re: Pesticide Use Policy
Annual Signature Acknowledgement

At the Rutgers New Jersey Agricultural Experiment Station (NJAES), controlling plant and livestock pests with crop protection pesticides is a privilege, not a right. Every faculty and staff member has a stake in assuring field and laboratory research involving pesticides is compliant with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), New Jersey Department of Environmental Protection (NJDEP) Licensing and Registration requirements and the attached NJAES Pesticide Use Policy. At any time, the Director of NJAES can revoke the pesticide application privileges of any investigator or applicator if they do not comply with this policy or applicable regulations.

The NJAES Pesticide Use Policy represents the best current safety and management practices for applying, storing and managing pesticides at our farms, extension centers, greenhouses and laboratories.

Please carefully review the attached NJAES Pesticide Use Policy, sign the appropriate acknowledgement form and send the signed form to:

Mark Robson, Ph.D.
Foran Hall, Room 186
Cook Campus

If you have any questions regarding the Pesticide Use Policy, you can contact any of the correspondents listed above.

NJAES Pesticide Use Policy

Standard Operating Procedures (SOPs)

SOPs identifying specific pesticide use and handling practices shall be provided to NJAES by Principal Investigators leading pest management and pesticide research projects. The SOPs shall be submitted to the offices of the Farms or Centers where they perform or specify applications and kept on file at that location.

SOPs are already an obligation for those performing pesticide research conforming to EPA Good Laboratory Practices (GLPs). Sample SOPs are available for your customization. Requests deviating from NJAES policies can be described in a SOP and then approved by the Director of Research. A Farm or Center may submit its own SOPs covering extensive crops at a single location. Principal Investigators shall maintain a signed copy of the NJAES Pesticide Use Policy with the SOPs.

Pesticide Applicator Licensing

Every applicator making research or maintenance treatments and/or those who write protocols for research treatments, will obtain a NJ Pesticide Applicators License in a category appropriate to their applications.

NJDEP Pesticide Operator Licenses (which allows an Operator to make applications under the direct supervision of a Commercial Pesticide Applicator) are not allowed under any circumstances.

All licensed applicators shall maintain a current copy of their valid NJDEP Pesticide Applicator's License at the offices of NJAES Farms, Centers, or Greenhouses where they perform application. This obligation applies to all investigators who design pest management experiments and/or specify research treatments as well as those who apply the pesticides.

Acknowledgement for Faculty, Principal Investigators and Staff Using Pesticides

I acknowledge I have received and read this document.

Name (print): _____

Signature: _____

Date: _____

Send a signed copy to Dr. Mark Robson, Foran Hall, Room 186, Cook Campus

Pesticide Worker and Pesticide Handler Requirements

Pesticide Workers are individuals who work in areas treated by pesticides but do not handle or apply pesticides. Pesticide workers are required to have Worker Protection Standard (WPS) training as specified below.

According to the NJAES Pesticide Use Policy, Workers are only allowed “early entry” into treated areas during the Restricted Entry Interval (REI) under the exception for short term activities which is found at 40 CFR 170.122 (c). If workers perform early entry under this exception, the applicator who applied the pesticides must ensure the early entry complies with all the requirements in 40 CFR 170.122 (c), which include but are not limited to the following:

- Workers are limited to working no more than 1 hour per worker per day (24 hour period).
- Entry into areas under an REI is permitted only after 4 hours have passed since the application was completed.
- The worker conducting the reentry is using the most stringent applicable personal protective equipment specified in the product labeling for early entry workers, or for the type of application conducted.
- The exception is utilized for short-term activities, which are being performed for research purposes.
- Workers are not permitted early reentry in areas treated with cholinesterase inhibitor pesticides.

Additionally the applicator who applied the pesticides must maintain worker early reentry records which contain the following information (Example form attached):

- Name of the worker performing the early reentry
- Description of work activities performed for research purposes
- Date, time and duration of the early reentry event (which shows 4-hour wait after application)
- PPE utilized during the early reentry event
- Verification that the inhalation exposure level has reached the level appropriate for early reentry (including ventilation criteria)

Pesticide Handlers are individuals who handle and apply pesticides under the direct supervision of a licensed pesticide applicator. According to the NJAES Pesticide Use Policy, Pesticide Handler status is only allowed for individuals who are completing the 40 Hours on-the-job training required to obtain a pesticide applicator license. These individuals must meet the following additional requirements:

- Obtain Worker Protection Standard (WPS) Training (For Handler & Worker status)
- Maintain proof they are working toward obtaining a pesticide applicator license and working under the of direct supervision of a licensed pesticide applicator (memo from Supervisor or Investigator)
- Cannot apply cholinesterase inhibiting pesticides (organophosphates and carbamates)
- Must obtain fit testing and medical monitoring if using respiratory protection

Worker Protection Standard (WPS) Training and Safety Requirements

The following are mandatory:

- Annual training for Workers and Handlers before working in treated locations
- No Entry signs posted outdoors in plots and fields when Re Entry Interval (REI) > 48 hours
- No Entry signs posted indoors in greenhouses when REI > 4 hours
- Application Exclusion Zone (AEZ) enforced around application equipment during applications
- Complying with the OSHA Respiratory Protection standard including annual medical evaluations, fit testing and training
- Maintaining records of training, pesticide applications, and Safety Data Sheets (SDSs) for a minimum of 5 years

Worker protection and safety are primary operating considerations. Project leader investigators, supervisors, and student advisors have the responsibility to assure all their employees or students receive WPS training before working in pesticide treated plots. This training must be completed annually in compliance with current state and federal law. WPS training is also required for unpaid volunteers (e.g., Master Gardeners) and student interns who will regularly perform seasonal fieldwork tasks on NJAES Research and Extension Farms. Training is not required for persons entering plots for educational or training purposes during field days, twilights and similar activities. Workers and Handlers are required to have evidence indicating they have completed the WPS training annually. Supervisors are required to maintain documentation of WPS training for all Workers and Handlers.

REHS will continue to provide annual respirator fit tests, worker right-to-know training and hazardous chemical waste removal and disposal services. It is the responsibility of each investigator or staff member applying pesticides to ensure compliance with these requirements.

Farm Supervisors, Farm Directors and Investigators are responsible to work collaboratively to meet the following requirements:

- Providing Occupational Health with the names of individuals who require respiratory protection and/or apply cholinesterase inhibiting pesticides
- Maintaining pesticide application records which meet the state and federal requirements (see attached suggested format)
- Maintaining early reentry records which meet the requirements stated above (see attached suggested format)
- Submitting their pesticide storage inventory to the local fire company and REHS annually by May 1st of each year (including a written description or diagram of the storage location)
- Ensuring use of warning postings and restricted reentry times
- Ensuring availability of pesticide labels and SDS in hardcopy or electronic form
- Maintaining emergency washing and eye wash stations
- Providing Personal Protective Equipment (PPE)
- Reporting accidents, spills, mishaps, or employee exposure events with the chain of reporting in Appendix 3.

Rinsate Management and Disposal

Clean operating at NJAES means avoiding creation of rinsates or any pesticide wastes requiring disposal, as well as avoiding accidental spills, exposures, or drift during all phases of pesticide use. When no rinsates are created through thoughtful handling and application techniques, there are no rinsates to dispose. Report accidents, spills, mishaps, or employee exposure events with the chain of reporting in Appendix 3.

All licensed applicators are aware of their responsibilities under NJDEP and FIFRA regulations. Researchers will define in their SOPs the practices they use to avoid creating wastes during handling and application, and their plan for proper disposal of wastes.

Licensed applicators are responsible for compliance throughout the entire work process beginning with the initial mixing operation, through the application, and concluding with proper rinsate disposal.

Appendix 1 restates U.S. EPA code exempting farm reapplication of rinsates from hazardous waste compliance when rinsates are properly reapplied. Applicators are responsible for reapplying rinsates to crops or land in accordance with FIFRA, the label or project protocol, or retaining rinsates and arranging for disposal with REHS.

A Rutgers staff member assigned to perform a pesticide application by a supervisor does not have to make the application if, in their judgment, making the application at that time presents risks of drift or other hazards not in compliance best practices as a licensed applicator. They can delay applications until conditions improve. Problems arising with insistent project leaders can be communicated directly to NJAES Administration. Applicators observed improperly disposing of rinsates are subject to NJAES disciplinary action described in Appendix 2.

Plot requests must incorporate designs with sufficient guard rows, bare ground (for herbicides), or other area in consultation with supervisors to reapply both treatment and maintenance pesticide rinsate wastes. Our operating goal is that disposal of pesticide wastes will not be needed by the investigator or Rutgers because they will not be created.

NJAES has provided funds and opportunity to retrofit sprayers for in-field rinsing to eliminate creation of tank rinsate wastes.

Each applicator and/or investigator at off-campus NJAES Research and Extension Farms should be issued labeled plastic carboys. These must be placed under sink drains when the pesticide storage building sinks are used. These rinsates must be reapplied as per protocol on plots. The sinks, counters, scales, and work areas will be maintained neat and clean at all times by all applicators at all locations.



Pesticide Storage

NJAES pesticide storage facilities are managed under the authority of a single responsible party at each location, and pesticide storage facilities must comply with the NJDEP Pesticide Control Program requirements found at the following links:

<https://pestmanagement.rutgers.edu/pat/>
<http://www.nj.gov/dep/enforcement/pcp/index.htm>.

NJAES has assigned this responsibility and authority to the Farm or Greenhouse Supervisors at each location where pesticides are stored. Report accidents, spills, mishaps, or employee exposure events with the chain of reporting in Appendix 3.

All pest control chemicals brought on-site and/or placed in storage facilities will be inventoried by written or other notification to the supervisors. All quantities applied or in any other way leaving the storage facility (e.g., donated to cooperators or returned to vendors) must be inventoried out with the supervisors (seasonally).

Arrangement of chemicals in storage facilities is under the authority of the NJAES Supervisors. Chemicals must be properly labeled and stored by their primary chemical characteristic, not by product category, manufacturer, or investigator. Primary chemical characteristics are flammables, corrosives, oxidizers or other similar characteristics. The Supervisors will work with investigators to find reasonable convenient arrangements for storage. Chemicals will be stored in plastic spill containment trays.

Chemicals which an owner determines will not be used according to registered use or protocol, for any reason, must be immediately brought to the attention of the Supervisors for designation as chemical waste and proper disposal.

Changes to NJAES Policies

Farm or Greenhouse supervisors will communicate any concerns to NJAES Administration.

NJAES invites consultation and input from investigators and staff to improve our policies. A NJAES team will review and amend these obligations to meet specific investigator or research farm needs. Members include: Margaret Brennan, Mark Robson, and Maureen Modica (REHS). Please refer comments to robson@sebs.rutgers.edu.

Appendix 1. Federal Code on Disposal of Pesticide Wastes

Subpart G § 262.70 Farmers. A farmer disposing of waste pesticides from his own use which are hazardous wastes is not required to comply with the standards in this part or other standards in 40 CFR parts 264, 265, 266, or 270 for those wastes provided he triple rinses each emptied pesticide container in accordance with § 261.7(b)(3) and disposes of the pesticide residues on his own farm in a manner consistent with the disposal instructions on the pesticide label. [53 FR 27165, July 19, 1988]

Appendix 2. Potential Employment Consequences for Non-Compliance

NJAES expects all pesticide users to act responsibly. Failure to comply with these requirements can have serious consequences, since a revocation of pesticide application functions would have a significant impact on the performance of one's position responsibilities.

Appendix 3. Reporting Chain for Accidental Pesticide Events

- 1) Render all needed assistance for first aid or spill prevention/containment.
- 2) Check medical contact information on WPS posting board on site.
- 3) Check and deploy spill prevention/containment kits on site.
- 4) Contact on-site farm, greenhouse, or facility Supervisors.
- 5) Contact Rutgers Environmental Health and Safety at 848-445-2550. After hours call Rutgers University Police Department (RUPD) at 732-932-7111



Pesticide Handler Training

All employees, students, or researchers receiving Pesticide Handler training must sign this form to acknowledge and agree that the training they receive is an interim step, along with 40 hours of supervised on-the-job training (OJT) meeting the minimum number of applications per category of work that will be used by them toward obtaining a NJ pesticide applicator license:

<http://www.nj.gov/dep/enforcement/pcp/bpo-appcom.htm>

Acknowledgement for Pesticide Handlers

As part of my employment at Rutgers University, I have been trained as a Pesticide Handler because I am working to fulfill the required hours necessary to obtain a NJDEP Pesticide Applicator License.

By signing this document I confirm that my intentions are to pursue becoming a licensed Pesticide Applicator.

I acknowledge I have received and read this document.

Name (print): _____

Signature: _____

Date: _____

Name of Trainer or Supervisor (print): _____

Send a signed copy to Dr. Mark Robson, Foran Hall, Room 186, Cook Campus

Worker Early Reentry Records

Applicator Name _____

Name of Worker Performing Early Reentry	Description of Work Activities Performed for Research Purposes	Date, Time and Duration of Early Reentry Event (which shows 4-hour wait after application)	PPE Utilized During Early Reentry Event	Verification Inhalation Exposure Level Reached Appropriate Level for Early Reentry (including ventilation criteria)

