Action Plan for a Permits Group in Regional FMD Response

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NESAA SA FMD-Response Exercise
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GET ORGANIZED

1. Establish a Permits Group
Request that **Incident Command** establish a Permits Group within the Operations Section. The Group should include designee(s) of animal-health, agriculture, and/or dairy inspectors from the New England states who are familiar with local operations and the **New England Secure Milk Supply Plan** as well as liaisons with the dairy industry (e.g., co-ops).  

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2. Request support in the Operations Section

a) Recommend that Operations mandate elevated biosecurity in the Control Area, at least until there are reliable assessments of the scale of the outbreak, the size and location of Control Area, and the epidemiological type of each premises within it.

- Quarantine Infected, Suspect, and Contact Premises.
- Stop feeding of garbage (including waste, unpasteurized milk or milk products) to swine in the Control Area.
- Stop movement of all susceptible livestock (cattle, swine, sheep, goats) to and from premises in the Control Area.
- Suspend agri-tourism (e.g., sleigh and hay rides, corn mazes, tours for visitors, field trips for school children) on premises with susceptible livestock in the Control Area.
- Stop direct-to-consumer sales of unpasteurized (“raw”) milk and milk products.
- Temporarily (only as long as necessary to assign Premises Types, no more than 3 days) stop direct-to-consumer sales (including home delivery) of milk or products made from raw milk that have been processed on-farm or in an abutting processing plant in the Control Area (e.g., Producer-Handlers). Before resuming such direct-to-consumer commerce, strict biosecurity should be required to minimize routes of contamination between (a) those areas, facilities, personnel, supplies, and equipment that touch susceptible livestock and (b) those that may directly or indirectly contact on-premises processing or sales operations.
- Temporarily (only as long as necessary to assign Premises Types, no more than 3 days) stop all shipments of unpasteurized milk to and from premises (dairy farms and processing plants) in the Control Area. Resume via premises-specific Permit or exemption.
- But do not recall pasteurized milk or products that are made from pasteurized milk or raw milk products that are adequately aged or acidified. (They pose negligible risk to human health.)

b) Recommend to Operations a policy that movement of unpasteurized dairy products (particularly milk) from farms to off-farm processors may be resumed to and from premises in the Control Area ONLY under permits that Incident Command may authorize for specific, sufficiently biosecure premises or groups of premises.2

c) Request that Operations clarify a procedure for authorizing the issuance of permits to move raw milk within the Control Area. Recommend that Operations delegate authority for issuing permits to the Permits Group (or that Incident Command delegate such authority to the Operations Section, in consultation with a Permits Group or its equivalent).

d) Request that Operations approve public notice (to be distributed to producers, haulers, and processors as well as state regulatory officials by the JIC) of the process for permitting movement of unpasteurized milk. (See “Notifications” and “Job Aids” in Attachments to the New England Secure Milk Supply Plan).

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2 “Sufficiently biosecure” is to be assessed according to the SMS Performance Standards, as interpreted and implemented by Incident Command.
e) Request regular status reports (e.g., updates at least once every 24 hours from the Disease Management or Surveillance Branch) on the boundaries of the FMD Control Area and the epidemiological status of premises within it.

3. **Request support from State Veterinarian(s)**
   
a) Ask the New England State Veterinarians to allow Incident Command to access to the NESAAASA database.

   b) Request state support for enforcement of permitting decisions (e.g., investigate alleged violations of quarantine orders or Permit requirements and report back to the Group).

4. **Request support in the Documentation Unit**
   
   Ask the Documentation Unit (in the Planning Section) to maintain (receive and process) records of permitting action (e.g., via Permits Group postings to Activities Log, ICS Form 214 or to Activity Log and Significant Events on WebEOC).

5. **Request support from the Liaison Officer**
   
   a) Serve as point of contact for dairy industry representatives (e.g., producers, co-ops, haulers, and processors).

   b) Reach out to agencies that are affected by the interruption in movement of livestock and livestock products but that may not be represented in the Permits Group (E.g., dairy regulators in Mid-Atlantic states, particularly New York, where producers ordinarily ship unpasteurized milk to New England dairy processing plants), providing access to incident updates and relaying concerns.

6. **Request support from the Joint Information Center (JIC)**
   
   Objective: Help minimize public panic (e.g., unwarranted concern about “factory farms” or FMD as a hazard to human health) and increase support for emergency response.

   a) Request the appointment of a Permits Group Liaison in the JIC.

   b) Recommend key messages for the public (See How to Communicate with Dairy Consumers about FMD):

   - **Foot-and-mouth disease is an extremely contagious disease of livestock.**
     - FMD spreads through a virus that can infect cattle and other cloven-hooved animals such as pigs, sheep, and goats.
     - The virus does NOT pose a significant risk to other sorts of animals, such as cats, dogs, hamsters, horses, or humans.
   - **FMD is not a public health concern.**
     - No major scientific or public health organization considers FMD a significant risk to human health.
     - Consumers can continue to drink pasteurized milk. Pasteurization of dairy products effectively eliminates the FMD Virus. Despite its presence in much of the rest of world for centuries, the disease has never been transmitted from pasteurized dairy products to humans.
     - FMD should not be confused with “Hand, Foot, and Mouth Disease,” a human disease that it is caused by a completely different virus than FMD.
• Public cooperation is important and appreciated in response to this animal-disease emergency.
  o Anticipate restrictions in commerce and travel. They are necessary to reduce the risk of spreading virus among livestock.
  o Avoid contact with susceptible livestock and the places where they live, whether they seem healthy or not, for the animals’ own protection.

c) Request that the JIC support dissemination of information about the permitting process.
  o The Permits Group should (after securing consent of the NESAASA State Veterinarians) share with the JIC contact information for dairy producers, haulers, and processors who operate in the Control Area.
  o Key messages for producers, haulers, and processors. (See “Notifications” and “Job Aids” Attachments to the New England Secure Milk Supply Plan).
    ▪ Livestock owners must learn the symptoms of FMD, check susceptible livestock, and report suspicious symptoms to the State Veterinarian. (See How to Spot Clinical Signs of FMD.)
    ▪ Increase biosecurity to minimize the risk of exposure and spreading of FMD virus (e.g., stop feeding garbage to hogs and feeding unpasteurized milk to susceptible species; stop shipments of susceptible animals and – at least temporarily – raw milk; stop agri-toursim, and suspend direct-to-consumer trade, especially raw milk). (See “Job Aids” in the New England Secure Milk Supply Plan, especially How to Reduce Risks to Your Farm and How Drivers Can Reduce the Risk of Spreading Infection.)
    ▪ Movement of products from susceptible animals (particularly milk) from farm to market may be resumed within, to, and from the control area only with sufficient biosecurity and under premises-specific permits to be issued by Incident Command. (See the SMS Performance Standards for biosecurity measures.)

d) Request that the JIC establish the capability to field queries about milk movement, to answer or to redirect questions in an efficient, orderly manner. Suggestions:
  o Questions about the content of policy (e.g., about the safety of dairy products, the targets of stop movement orders, or the permitting process) should be answered with a minimum of resources (e.g., via redirection to pre-recorded messages, press releases, and on-line postings maintained by the JIC itself).
  o Reports of violations (e.g., specific sightings of a quarantine failure, unpermitted milk movement, or other incident-relevant biosecurity breeches) should be referred to state or local officials with authority to enforce agricultural regulations.
  o Reports of changes in herd health, producer or processor challenges to the granting or rejection of a particular Permit, or state-enforcement findings on alleged violations should be referred to the Permits Group.

7. Set a decision-making schedule and appoint a time-keeper for each operational period.

a) Define and insofar as possible meet step-by-step deadlines to be sure that permitting decisions can be considered, recommended, reviewed, revised, authorized, issued, and transmitted in time for regulators, producers, coops, haulers, and processors to respond (e.g., by 3 PM on the day prior to eligible milk pickup).

b) Adjust deliberation standards and/or the schedule to achieve optimum balance between careful and decisive action.
ESTABLISH AND IMPLEMENT A PROCEDURE FOR ISSUING PERMITS

8. Identify premises that require and are eligible for a Permit

a) Review the latest reports (e.g., from the Disease Management or Surveillance Branch of Operations) on the boundaries of the FMD Control Area and epidemiological status of premises within it. (See NAHEMS Guidelines on Continuity of Business and Classification of Phases and Types of a FMD Outbreak and Response and the Ready Reference Guide on Zone, Area, and Premises in an FAD Outbreak.)

<table>
<thead>
<tr>
<th>Premises</th>
<th>Definition</th>
<th>Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infected Premises (IP)</td>
<td>Premises where presumptive positive case or confirmed positive case exists based on laboratory results, compatible clinical signs, FMD case definition, and international standards.</td>
<td>Infected Zone</td>
</tr>
<tr>
<td>Contact Premises (CP)</td>
<td>Premises with susceptible animals that may have been exposed to FMD, either directly or indirectly, including but not limited to exposure to animals, animal products, fomites, or people from Infected Premises.</td>
<td>Infected Zone, Buffer Zone</td>
</tr>
<tr>
<td>Suspect Premises (SP)</td>
<td>Premises under investigation due to the presence of susceptible animals reported to have clinical signs compatible with FMD. This is intended to be a short-term premises designation.</td>
<td>Infected Zone, Buffer Zone, Surveillance Zone, Vaccination Zone</td>
</tr>
<tr>
<td>At-Risk Premises (ARP)</td>
<td>Premises that have susceptible animals, but none of those susceptible animals have clinical signs compatible with FMD. Premises objectively demonstrates that it is not an Infected Premises, Contact Premises, or Suspect Premises. At-Risk Premises seek to move susceptible animals or products within the Control Area by permit. Only At-Risk Premises are eligible to become Monitored Premises.</td>
<td>Infected Zone, Buffer Zone</td>
</tr>
<tr>
<td>Monitored Premises (MP)</td>
<td>Premises objectively demonstrates that it is not an Infected Premises, Contact Premises, or Suspect Premises. Only At-Risk Premises are eligible to become Monitored Premises. Monitored Premises meet a set of defined criteria in seeking to move susceptible animals or products out of the Control Area by permit.</td>
<td>Infected Zone, Buffer Zone</td>
</tr>
<tr>
<td>Free Premises (FP)</td>
<td>Premises outside of a Control Area and not a Contact or Suspect Premises.</td>
<td>Surveillance Zone, Free Area</td>
</tr>
<tr>
<td>Vaccinated Premises (VP)</td>
<td>Premises where emergency vaccination has been performed. This may be a secondary premises designation.</td>
<td>Containment Vaccination Zone, Protection Vaccination Zone</td>
</tr>
</tbody>
</table>

b) Recommended: **When Premises Types are unknown**, treat every farm in a FMD Control Area as if it were “FMD infected but undetected,” and hence not yet eligible to receive a milk-pickup permit. (This is to err on the side of disease control.)
c) Recommended: When Premises Types are known, use the following decision tree to determine when a permit is required and possible.

![Decision Tree Diagram]

d) So, limiting conditions for a permit to ship unpasteurized milk from a farm to a processing plant should depend on the premises type and its location.
- In general, Infected, Suspect, or Contact Premises should not be eligible for permits for milk pickup, and Free Premises outside the Control Area should not need permits.
• Eligibility criteria for other premises types may be more or less restricted, depending on the scale of the incident and the associated losses to food supply and business continuity or recovery capacity vs. disease-control gains.
  o In a relatively small outbreak – Type 1 (Focal) or Type 2 (Moderate Regional) – Monitored and At-Risk Premises may not be considered eligible for permits.
  o In a regional or larger outbreak – Type 3 (Large Regional), Type 4 (Widespread or National), Type 5 (Catastrophic) or Type 6 (North American) – Monitored and At-Risk Premises in the Control Area should be considered eligible, for the sake of sustaining the food supply, environmental protection, farm survival and recovery.
• More specific eligibility requirements should depend on biosecurity capacity ("Readiness") and practices of the farm, the hauler, and the processor. (See also SMS Performance Standards.)

When and where can unpasteurized milk be shipped from a farm during a FMD outbreak?

<table>
<thead>
<tr>
<th>PREMISES TYPE</th>
<th>PREMISES LOCATION</th>
<th>PICK UP RAW MILK?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Free Premises</td>
<td>Beyond the Surveillance Zone</td>
<td>Yes, no Permit necessary</td>
</tr>
<tr>
<td>Free Premises</td>
<td>Surveillance Zone</td>
<td>Yes, no Permit necessary</td>
</tr>
<tr>
<td>Protection Vaccination Zone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Free Premises</td>
<td>Protection Vaccination Zone</td>
<td>Yes, if premises is Ready</td>
</tr>
<tr>
<td>Vaccinated Premises (at least 14 days post)</td>
<td>Protection Vaccination Zone</td>
<td>Yes, if premises is Ready</td>
</tr>
<tr>
<td>Control Area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Free Premises</td>
<td>Containment Vaccination Zone</td>
<td>Yes, if premises is Ready</td>
</tr>
<tr>
<td>Vaccinated Premises (at least 14 days post)</td>
<td>Containment Vaccination Zone</td>
<td>Yes, if premises is Ready</td>
</tr>
<tr>
<td>Monitored Premises</td>
<td>Infected Zone or Buffer Zone</td>
<td>Yes, if premises is Ready and if response is Regional</td>
</tr>
<tr>
<td>At-risk Premises</td>
<td>Infected Zone or Buffer Zone</td>
<td>Yes, if premises is Ready and if response is Regional</td>
</tr>
<tr>
<td>Suspect Premises</td>
<td>Infected Zone or Buffer Zone</td>
<td>No</td>
</tr>
<tr>
<td>Contact Premises</td>
<td>Infected Zone or Buffer Zone</td>
<td>No</td>
</tr>
<tr>
<td>Infected Premises</td>
<td>Infected Zone</td>
<td>No</td>
</tr>
</tbody>
</table>

In short, in Regional FMD Response, requirement and eligibility for Permits to ship raw milk in the Control Area should be confined to Free, Vaccinated, Monitored, and At-risk Premises that are Ready.³

³ Roughly speaking, a dairy farm is “Ready” when Incident Command determines that its biosecurity measures are adequate. See SMS Performance Standards for Dairy Premises, Haulers, and Processing Plants (January, 2012) in the SMS Plan Executive Summary with Supporting Documents on FAD PReP.
9. Assess and prepare a response to the reliability of data on farm Readiness.

a) Review the quality of existing data (survey results and Readiness Ratings in the NESAASA database) on the biosecurity capacity of eligible dairy farms.
   - Are these data sufficiently complete and up-to-date to be used in timely permitting decisions?
   - Are there resources (time, people, biosecurity, transport, information technology) to significantly improve the reliability of the data?
     - From the Permits Group?
     - From the private sector (e.g., co-ops or dairy promotion boards)?
     - From Operations (e.g., as an add-on for existing surveillance efforts)?
     - From the state(s) or universities (e.g., Ag Extension, vet schools)?
   - In the absence of additional resources, are the benefits to continuity of operation (vs. disease transmission) sufficient to justify using existing data in permitting decisions until resources are adequate to increase their reliability?

b) When feasible, develop and implement a procedure for verifying, updating, and improving data on farm Readiness, taking into account the resources required (e.g., the number of premises to be overseen), the resources available, and the importance of timely decision-making.
   - Select an instrument for verifying the completeness and accuracy of Readiness data on eligible premises – e.g., ranging from more to less thorough and demanding:
     - On-site Inspection of the premises by an animal-health official.
     - Telephone call by an official or designee to a farm manager.
     - Emailed or FAXed questionnaire to a farm manager.
     - Mandatory check-off on the permit form.
     - Trust in the farm manager, plus spot checks and/or response to complaints.
   - Select a scope for using the instrument – e.g., ranging from more to less thorough and demanding:
     - All eligible farms.
     - A stratified sample of farms, including premises that are in the middle and extremes of the distribution of risk for disease transmission (e.g., number of cattle, frequency of milk pickup, and latest Readiness Rating).
     - A random, grab, or opportunistic sample of “representative” farms (e.g., piggy-backing on other incident-response surveillance activity).
     - Farms that come to the Group’s attention as the subjects of complaints or as sites for which data are too incomplete or outdated for a permitting decision.

10. Identify premises that meet the Readiness requirement for a Permit.
    Using information that the Permits Group has found reliable, identify which eligible premises have sufficiently met SMS Biosecurity Performance Standards to qualify for a Permit to ship unpasteurized milk to an off-farm processing plant. Procedure:

a) **Using the Readiness Rating** in the NESAASA Database
1) Access state- or region-level data in the NESAASA Farm Database (currently on a FAZD server, with passwords issued to State Veterinarians).

2) Generate a Report, listing eligible farms (e.g., name, Premises ID, address, and contact information) with the Readiness Rating for each premises. Note: it may be necessary to generate a Report on all farms and then select eligible farms by hand in a database application. (Note examples of on-line aids for locating premises in an area by zip code Zip Code Radius Finder or by mapping BatchGeo.)

3) Choose a provisional minimum Readiness Rating. **Recommended:** In a regional event, to qualify for a Permit, a farm should have a Readiness Rating of at least 50. That minimum would allow Permits to be granted to all farms that have documented capacity (with a day or two of notice, on their own) to secure their perimeter, provide a clean path to the bulk tank, and operate a wash station at the farm gate. In all, about 85% of surveyed farms claimed that capacity in the presence of state agent.4

The choice of the required, minimum Readiness Rating is a key, inescapably contestable step. The optimal number is apt to depend on the incident type and the stage of response as well as the priorities of Incident Command in balancing inherently conflicting objectives – on the one hand to protect continuity of operations, the food supply, and prospects for recovery, and on the other to minimize risk of spreading infection that is the source of the emergency.

The chosen minimum Readiness Rating may well vary inversely with the severity of the outbreak and the size of the Control Area. The smaller the Control Area, the greater the prospects of containing infection at relatively little cost to operations, and hence, the greater the net value of requiring a high minimum Readiness Rating. Conversely, the larger the Control Area, the greater the relative cost to continuity of operations or recovery and hence the greater value of allowing a lower minimum Readiness Rating.

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4 As of 4/1/2013, 611 dairy farms were in the NESAASA database, about 40% of all licensed dairy farms in New England. Note that, in this sample, the share of production is well correlated with the number of farms, and Readiness Ratings are independent of farm size.
4) Check appropriateness of the provisional minimum Readiness Rating.
   E.g., access the NESAASA Farm Database to assess farms slightly above and below that provisional rating (and/or ones known to a member of the Permits Group) to determine if the provisional minimum Readiness Rating would (given the status of the incident) properly distinguish qualifying from disqualifying farms.

5) Assuming that this minimum Readiness rating may be required, assess the likely impact on production, the sustainability of farm operations and the food supply (and therefore, conversely, the impact of waste, financial and animal-welfare distress on disqualified farms).
   E.g., access the NESAASA Farm Database to generate a report, listing the output of farms that meet the provisional minimum rating (and/or refer to the appendix, “Readiness of New England Dairy Farms”) to estimate the impact.

6) Adjust the provisional minimum Readiness Rating accordingly -- to be sure the required minimum Reading Rating is reasonably allied with assessments of a grab sample of farms scoring above and below the minimum and with anticipated impacts on dairy production and sustainability.

b) When appropriate, add consideration of criteria that are more or less restrictive than the minimum Readiness Rating.

   • Examples of when such consideration may be appropriate:
     o When particular biosecurity capabilities are more effective in disease control than the full mix of practices reflected in the Readiness Rating.
       ▪ E.g., farms that can load milk off-premises, with negligible risk of contaminating the exterior of the tanker during milk pickup
       ▪ E.g., farms, such as Producer-Handlers or artisan cheese makers, that chiefly rely on direct-to-consumer sales rather than frequent shipments.
     o When clusters of farms within the Control Area warrant different minimum Readiness Ratings (e.g., clusters that are, in effect, epidemiologically isolated – separated by distance, prevailing weather, service routes, or traffic patterns).
     o When a specific subset of criteria warrant more or less attention than assigned in the composite Readiness Rating (e.g., seasonal requirements, such as steam washers).

   • Procedure
     1) Access state-level data in the NESAASA Farm Database (currently on a FAZD server, with passwords issued to State Veterinarians)
     2) Generate a Report, listing eligible farms (at least name, Premises ID, address, and contact information), screened by criteria that are more or less restrictive that the overall Readiness Rating. This additional screening can be accomplished by adding filters to the Report or by sorting data from an unfiltered Report with a spreadsheet application, such as Excel.
     3) Adjust and/or supplement the provisional minimum Readiness Rating accordingly – to be sure that requirements are reasonably allied with assessments of a grab sample of farms scoring above and below the minimum and with anticipated impacts on dairy production and sustainability.

11. Establish conditions for expiration of Permits
   a) Permits may be issue for each pick-up, a certain period of time (e.g., the coming week) or indefinitely, for all future pickups.
Recommended: A Permit qualifies a premises for milk pick up from the date of issue forward, until/unless the Permit is revoked or no longer required.

b) Among the reasons that Incident Command may revoke a Permit are:
   - A change in the boundaries of the Control Area,
   - A change in the health of the farm’s herd,
   - A farm’s failure to maintain adequate biosecurity.

12. Issue Permits
   a) As necessary, obtain authorization to issue the Permits.
   b) Compile a list of farms (name, premises ID, address, and contact information) that have the requisite minimum Readiness Rating (plus or minus other, more or less restrictive criteria).
   c) Publicize the list of Permitted Premises (stripped of confidential information, such as the Premises ID).
      a. FAX the list to the State Veterinarians and/or Milk Regulators, asking them to convey the lists to the premises and their agencies’ enforcement officers.
      b. FAX the lists to the dispatchers in the major Co-Ops (Agri-Mark, DFA/DMS, St. Albians), asking them to distribute the lists to their members and contract haulers, along with reminders of biosecurity requirements for haulers and processors.
Appendix 1: Readiness of New England Dairy Farms

*611 farms surveyed as of 4/1/2013
Share of New England Dairy Farms* by Readiness Rating

*611 farms surveyed as of 4/1/2013
<table>
<thead>
<tr>
<th>Readiness Rating</th>
<th>Share of Farms by Rating</th>
<th>Share of Farms at or above Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10</td>
<td>0.00%</td>
<td>100.00%</td>
</tr>
<tr>
<td>10-15</td>
<td>0.16%</td>
<td>99.84%</td>
</tr>
<tr>
<td>15-20</td>
<td>0.00%</td>
<td>99.84%</td>
</tr>
<tr>
<td>20-25</td>
<td>0.65%</td>
<td>99.18%</td>
</tr>
<tr>
<td>25-30</td>
<td>2.45%</td>
<td>96.73%</td>
</tr>
<tr>
<td>30-35</td>
<td>2.62%</td>
<td>94.11%</td>
</tr>
<tr>
<td>35-40</td>
<td>3.44%</td>
<td>90.67%</td>
</tr>
<tr>
<td>40-45</td>
<td>2.45%</td>
<td>88.22%</td>
</tr>
<tr>
<td>45-50</td>
<td>3.76%</td>
<td>84.45%</td>
</tr>
<tr>
<td>50-55</td>
<td>9.00%</td>
<td>75.45%</td>
</tr>
<tr>
<td>55-60</td>
<td>16.69%</td>
<td>58.76%</td>
</tr>
<tr>
<td>60-65</td>
<td>25.53%</td>
<td>33.22%</td>
</tr>
<tr>
<td>65-70</td>
<td>17.68%</td>
<td>15.55%</td>
</tr>
<tr>
<td>70-75</td>
<td>3.11%</td>
<td>12.44%</td>
</tr>
<tr>
<td>75-80</td>
<td>2.78%</td>
<td>9.66%</td>
</tr>
<tr>
<td>80-85</td>
<td>6.22%</td>
<td>3.44%</td>
</tr>
<tr>
<td>85-90</td>
<td>2.78%</td>
<td>0.65%</td>
</tr>
<tr>
<td>90-95</td>
<td>0.49%</td>
<td>0.16%</td>
</tr>
<tr>
<td>95-100</td>
<td>0.16%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Criterion Weight</th>
<th>Share of Farms with a Positive Raw Score</th>
<th>Readiness Rating of Farms That Are Capable**</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Ready*</td>
<td>Capable**</td>
</tr>
<tr>
<td>Security of the farm perimeter</td>
<td>19.7</td>
<td>0%</td>
<td>60.9%</td>
</tr>
<tr>
<td>Sanitation of the route from the roadway to the bulk tank</td>
<td>25.7</td>
<td>0%</td>
<td>44.5%</td>
</tr>
<tr>
<td>Capacity to clean and disinfect dairy traffic</td>
<td>54.6</td>
<td>0%</td>
<td>47.6%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100</td>
<td>0%</td>
<td>16.9%</td>
</tr>
</tbody>
</table>
Appendix 2: Readiness Section of Farm Survey

READINESS

With some diseases, especially FMD, infection can spread faster than clinical signs of disease. In an infected region, livestock may seem fine long after they have begun hosting and shedding virus. For safety’s sake, then, in aiming to protect your livestock and your neighbors’, at the beginning of an outbreak we plan to treat all dairy traffic in a disease control area as if it could be carrying infection. Precautions will be required.

The following questions are intended to anticipate how tough it would be for your farm to elevate its biosecurity appropriately, to reduce the risk of spreading infection as vehicles and visitors come and go. Current state plans require that such precautions be in-place before commercial traffic will be permitted.

PERIMETER

Insofar as possible, preference in permitting emergency milk movement will be granted to premises that present a physical barrier to infection, that could, in effect, wall it off.

<table>
<thead>
<tr>
<th>About how far is the perimeter of dairy operations from the nearest neighboring premises with FMD-susceptible animals (cloven hoofed animals):</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ 0 (abutting property)</td>
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<tr>
<td>□ 0-2 miles (more than 0 but less than 2)</td>
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<tr>
<td>□ 2-6 miles (more than 2 but less than 6)</td>
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<tr>
<td>□ 6 miles or more</td>
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Number of employees in the dairy operation who also work on another farm with FMD-susceptible animals:

Note: Most of the following questions about biosecurity give you three possible answers:

- **“Yes”** means that the precaution is already in-place, ready-to-go.
- **“Not now, but possible”** means that, though the precaution isn’t yet in-place, you could establish it with your own resources, within a day or two.
- **“No, impossible”** means that establishing the precaution would require more resources than you could muster on your own within a couple of days.

<table>
<thead>
<tr>
<th>Yes</th>
<th>Not now, but possible</th>
<th>No, impossible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is there a gate that could be closed to restrict access to the entire farm or to the areas where livestock are kept?</td>
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<tr>
<td>Are signs posted and plainly visible to discourage visitors from entering areas where they might come into contact with livestock or manure – where permission, check-in and biosecurity precautions are required?</td>
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<tr>
<td>Could a hauler pick up milk without the tanker entering the farm premises?</td>
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</table>
ENTRANCE

Insofar as possible, preference in permitting emergency milk movement will be granted to premises that are best designed to monitor and control traffic and to reduce the risk of picking up or shedding contaminants on the premises.

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>Not now, but possible</th>
<th>No, impossible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is there one entrance to the dairy operation that is clearly posted and visible from the public right-of-way – a spot that could serve as point for controlling, logging in and logging out all vehicles, visitors, and employees?</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Is the lane from the entrance to the bulk tank free from agricultural run-off (e.g., from pens or pasture)?</td>
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<tr>
<td>Is the lane from the entrance to the bulk tank separate from (as opposed to shared with) other essential on-farm traffic?</td>
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<tr>
<td>Cattle crossing?</td>
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<td></td>
<td></td>
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<tr>
<td>Manure hauling?</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Livestock shipments?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Movement of other field equipment?</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Feed delivery?</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Employee parking?</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Visitor parking?</td>
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</table>

Surface of the lane from the entrance to the milk bulk tank hookup:
- Paved (concrete or asphalt)
- Permeable (gravel or dirt)

Parking surface for a truck while loading milk from the bulk tank:
- Paved (concrete or asphalt)
- Permeable (gravel or dirt)

DECONTAMINATION FACILITIES

Insofar as possible, preference in permitting emergency milk movement will be granted to premises that are best equipped to clean and disinfect (C&D) traffic as it enters and leaves the farm.

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>Not now, but possible</th>
<th>No, impossible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are there functioning foot baths for employees and visitors at entries to areas where they may be exposed to livestock, feed, milk or manure?</td>
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<tr>
<td>Is there a functioning wash station – a facility to clean and disinfect traffic at the entrance?</td>
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<tr>
<td>Even if there is no wash station, is there a place for one near the entrance that is:</td>
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<tr>
<td>Large enough for washing vehicles (e.g., at least as long as the largest tanker expected)?</td>
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</tbody>
</table>
Free of run off or other sources of re-contamination (e.g., from routine livestock movement or manure handling) between that site and the public roadway?

Pitched toward a containment area or a ditch that does NOT drain directly into a wetland or waterway?

Capable of containing waste wash water?

Whether there is a wash station or not, are there appropriate supplies and equipment near the entrance:

- Water supply?
- Electrical power?
- A pressure washer?
- A steam/hot washer?
- Sanitizer (Sufficient inventory for at least 3 days of vehicle C&D?)
  - Types on-hand:
    - Acetic Acid (vinegar)
    - Sodium hypochlorite (household bleach)
    - Other EPA-approved disinfectant (e.g., Virkon-S)
- Personal protective equipment (PPE) that is disposable or waterproof to withstand washing and disinfection while being worn.
  - Types on-hand:
    - Gloves
    - Goggles
    - Boots
    - Coveralls (e.g., Tyvex)

Roughly, the more “yes” answers that are documented in this survey and then verified, the safer it would be for authorities to permit traffic to and from your farm in an emergency. Each “no” suggests an opportunity for improving biosecurity and sustainability of your dairy operations.

But note, too: In assessing risks and issuing permits, regulators will consider a larger number of factors than this one survey. Some biosecurity measures are more effective than others (e.g., answers may be assigned weights). Given unique locations, management styles, herd sizes and finances, each farm may also be unique in its ability to resist disease transmission. In an actual emergency, information from surveys will be used in combination with other characteristics of the incident.
Appendix 3: Weighted Criteria for Rating Producer Readiness

In 2012, the members of the New England States Animal Agriculture Security Alliance – officials in each of the six states plus the Area Office of USDA/APHIS/VS – assessed the relative importance of biosecurity criteria for emergency milk movement. Through Analytic Hierarchy Process (via Decision Lens) the “readiness” of each producer to move milk was calculated as the sum of the products of the raw scores for the answers to each question in the producer survey (e.g. Yes = 1.0 or Possible = 0.5) times the weight that NESASA members assigned to that question. Weights were normalized so that the maximum total equals 1.0 – a “Readiness Rating” of 100.