STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

DAVID P. LITTELL
COMMISSIONER

August 15, 2006

Mr. Carl McCue
Country Acres Farm
P.O. Box 758
Hampden, ME. 04444

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0036821
Maine Waste Discharge License (WDL) Application #W008243-5S-A-N
Concentrated Animal Feeding Operation (CAFO)
Final Permit/License

Dear Mr. McCue:

Enclosed please find a copy of your **final** MEPDES permit and Maine WDL which was approved by the Department of Environmental Protection. Please read the permit/license and its attached conditions carefully. You must follow the conditions in the order to satisfy the requirements of law. Any discharge not receiving adequate treatment is in violation of State Law and is subject to enforcement action.

Any interested person aggrieved by a Department determination made pursuant to applicable regulations, may appeal the decision following the procedures described in the attached DEP FACT SHEET entitled "*Appealing a Commissioner's Licensing Decision.*"

If you have any questions regarding this matter, please feel free to call me at 287-7693.

Sincerely,

Gregg Wood
Division of Water Quality Management
Bureau of Land and Water Quality

Enc.

cc: Jonathan Chalmers, DAFRR
William Seekins, DAFRR
Sandy Lao, USEPA
Denny Dart, USEPA
Mark Hedrich, DEP/DAFRR
James Sohns, DEP/EMRO
Doug Koopman, USEPA

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STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE HOUSE STATION 17 AUGUSTA, MAINE 04333

DEPARTMENT ORDER

IN THE MATTER OF

COUNTRY ACRE FARM	)	MAINE POLLUTANT DISCHARGE
DIXMONT, PENOBSCOT COUNTY, MAINE	)	ELIMINATION SYSTEM PERMIT
CONCENTRATED ANIMAL FEEDING OPERATION	)	AND
ME0036821	)	WASTE DISCHARGE LICENSE
W008243-5S-A-N **APPROVAL**	)	**NEW**

Pursuant to the provisions of the Federal Water Pollution Control Act, Title 33 USC, Section 1251, et seq. and Maine Laws 38 M.R.S.A. and 7 M.R.S.A. et seq., and applicable regulations, the Maine Department of Environmental Protection (DEP hereinafter) has considered the application of the COUNTRY ACRE FARM, with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

The applicant has applied to the Maine DEP for a combination Maine Pollutant Discharge Elimination System (MEPDES) permit and Maine Waste Discharge License (WDL) to discharge storm water to Martin Stream and an adjacent wetland (both Class A waterbodies) and manage process waste waters that are generated by the operation of a concentrated animal feeding operation (CAFO) located in the Town of Dixmont such that there is no discharge to surface waters. The permittee has requested the Department approve (on a temporary basis) the use of a surface waste water disposal system.

PERMIT SUMMARY

This permitting action is requiring the permittee to develop and implement Best Management Practices (BMP's) to prevent discharges to waters of the State of Maine, develop and implement a Nutrient Management Plan and obtain a Livestock Operation Permit (LOP) pursuant to Maine law, 7 M.R.S.A., §4204 and §4205 respectively. The Nutrient Management Plan shall be developed and implemented in accordance with Maine Department of Agriculture, Food and Rural Resources (DAFRR) regulation Chapter 565, *Nutrient Management Rules,* §6.

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated June 20, 2006 and subject to the Conditions listed below, the DEP makes the following CONCLUSIONS:

1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below such classification.

2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with state law.

3. The provisions of the State's antidegradation policy, 38 M.R.S.A., Section 464(4)(F), will be met, in that:

   a. Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;

   b. Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;

   c. The standards of classification of the receiving water body are not met or, where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet standards of classification;

   d. Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification, that higher quality will be maintained and protected; and

   e. Where a discharge will result in lowering the existing quality of any water body, the Department has made the finding, following the opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.

4. The discharge will be subject to effluent limitations that require application of best practicable treatment.

ACTION

THEREFORE, the DEP APPROVES the above noted application of COUNTRY ACRE FARM, to discharge storm water to Martin Stream and an adjacent wetland, Class A waterbodies and manage process waste waters generated by the operation of a concentrated animal feeding operation (CAFO) located in Dixmont such that there are no discharge(s) to surface waters. The CAFO is SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations, including:

1. "*Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits*," revised July 1, 2002, copy attached.

2. The attached Special Conditions, including any effluent limitations and monitoring requirements.

3. This permit expires five (5) years from the date of signature below.

DONE AND DATED AT AUGUSTA, MAINE, THIS 15th DAY OF August, 2006.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Deborah M. Garrett
DAVID P. LITTELL, Commissioner

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: June 19, 2006.

Date of application acceptance: June 19, 2006.

FILED
AUG 16 2006
BOARD OF ENVIRONMENTAL PROT.
STATE OF MAINE

Date filed with Board of Environmental Protection _____

This order prepared by Gregg Wood, BUREAU OF LAND AND WATER QUALITY

SPECIAL CONDITIONS

A. DISCHARGE LIMITATIONS

1. There shall be no discharge of process generated waste waters to Martin Stream or adjacent wetlands. See Special Condition K(3) of this permit for a definition of process waste waters.

2. Discharge(s) of storm water shall;

   a. Not contain a visible oil sheen, foam or floating solids in the receiving waters at any time which would impair the usages designated by the classification of the receiving waters.

   b. Not contain materials in concentrations or combinations which are hazardous or toxic to aquatic life, or which would impair the usages designated by the classification of the receiving waters.

   c. Not cause visible discoloration or turbidity in the receiving waters which would impair the usages designated by the classification of the receiving waters.

   d. Notwithstanding specific conditions of this permit, discharges must not lower the quality of any classified body of water below such classification, or lower the existing quality of any body of water if the existing quality is higher than the classification.

3. Notification of discharge(s):

   If, for any reason, there is a discharge of process waste water from the facility to surface waters, non-compliance with this permit or a discharge that may endanger human health or the environment, the permittee is required to make verbal notification (within 24 hours) and written notification (within 5 days) to the Maine Department of Environmental Protection (DEP) and the Department of Agriculture, Food and Rural Resources (DAFRR) entities listed in paragraph A(3)(e) below. In addition, the permittee shall keep a copy of the notification submitted to the Maine DEP and DAFRR together with the Nutrient Management Plan required by Special Condition D of this permit. The discharge notification shall contain the following information:

   a. <u>Description of the discharge</u>: A description and cause of the discharge, including a description of the flow path to the receiving water body and an estimation of the flow and volume discharged.

   b. <u>Time of the discharge</u>: The period of discharge, including exact dates and times, and the anticipated time the discharge is expected to continue.

SPECIAL CONDITIONS

A. DISCHARGE LIMITATIONS (cont'd)

c. Cause of the discharge: If caused by precipitation event(s), information from the onsite rain gauge required by Special Condition E(6) of this permit concerning the size of the precipitation event must be provided.

d. Steps being taken to reduce, eliminate and prevent recurrence of the non-complying circumstances or discharges.

e. Verbal notification must be made to the Maine DEP and DAFRR within 24-hours of the facility discharge. Written notification including the information required above must be received by the Maine DEP and DAFRR within five (5) calendar days of the discharge. The contact telephone numbers and addresses are:

Maine Department of Agriculture, Food and Rural Resources
Office of Agriculture, Natural and Rural Resources
Attn: Nutrient Management Program
28 State House Station
Augusta, Maine 04333-0028 Telephone: (207)-287-1132

Maine Department of Environmental Protection
Attn: Compliance Inspector
Bureau of Land & Water Quality
Division of Water Quality Management
106 Hogan Road
Bangor, Maine 04011 Telephone: (207)-941-4571

4. Monitoring requirements for process water discharges: In the event of an overflow (or pre-planned emergency discharge) or any other discharge from the storage lagoons, other waste water storage structures or feed storage operations, the following actions shall be taken:

a. Analysis of the discharge: All discharges shall be sampled and analyzed. Samples must, at a minimum, be analyzed for the following parameters:

Fecal coliform bacteria
Five-day biochemical oxygen demand (BOD_5)
Total suspended solids (TSS)
Total phosphorus as phosphorus
Ortho-phosphorus
Ammonia-nitrogen as nitrogen
Total kjeldahl nitrogen (TKN) as nitrogen
Nitrate nitrogen
pH

SPECIAL CONDITIONS

A. DISCHARGE LIMITATIONS (cont'd)

b. Sampling procedures: Samples shall consist of grab samples collected from the overflow or discharges from the retention structure. A minimum of one sample shall be collected from the initial discharge (within 30 minutes or upon discovery). The sample shall be collected and analyzed in accordance with EPA approved methods for water analysis listed in 40 CFR 136. Samples collected for the purpose of monitoring shall be representative of the monitored discharge. If more than one sample is collected during the discharge, the samples may be composited (with the exception of pH and fecal coliform bacteria) when analyzed for the parameters in Special Condition A(4)(a) of this permit. Monitoring results must be submitted to the DAFRR and DEP at the addresses in A(3)(e) of this permit within 30 days of the discharge event.

B. BEST MANAGEMENT PRACTICES

Each of the following minimum standards is designed to achieve the objective of preventing discharges of pollutants to waters of the State of Maine from CAFOs and from land application activities under the operational control of the CAFO. Minimum standards or portions of minimum standards to be implemented on the effective date of the permit. In addition to these minimum standards, permittees are also required to comply with other applicable technology-based and water quality-based effluent limitations of this permit.

a. Minimum Standard: Buffers or Equivalent Practices - Provide and maintain buffer strips or other equivalent practices near feedlots, manure storage areas, and land application areas that are sufficient to minimize discharge of pollutants to surface waters of the State of Maine (e.g., soil erosion and manure and waste water). These practices may include, but are not limited to, residue management, conservation crop rotation, grassed waterways, strip cropping, vegetative buffers, forested riparian buffers, terracing, and diversion.

b. Minimum Standard: Divert Clean Water -Design and implement management practices to divert clean water and floodwaters from contact with feedlots and holding pens; animal manure; or manure and/or process waste water storage systems. Clean water includes rain falling on the roofs of facilities, runoff from adjacent land, or other sources.

c. Minimum Standard: Prevent Direct Contact of Animals With Surface Waters of the State of Maine - Develop and implement appropriate controls to prevent direct access of animals in confinement to surface waters of the State of Maine and to protect water quality.

d. Minimum Standard: Animal Mortality - Handle and dispose of dead animals in a manner that prevents contamination of surface waters and ground waters of the State of Maine.

SPECIAL CONDITIONS

B. BEST MANAGEMENT PRACTICES (cont'd)

e. Minimum Standard: Chemical Disposal - Prevent introduction of chemicals into manure and waste water storage structures for purposes of disposal. Examples include pesticides, hazardous and toxic chemicals, and petroleum products/by-products.

f. Minimum Standard: Proper Operation & Maintenance - Implement an operation and maintenance program that involves periodic visual inspection and maintenance of all manure storage and handling equipment and structures and all runoff management devices (e.g., cleaning separators, barnyards, catch basins, screens, annual calibration of land application equipment, maintenance of filter strips) and to-prevent discharges of pollutants to surface water s of the State of Maine.

g. Minimum Standard: Maintain Proper Storage Capacity - Maintain sufficient freeboard in liquid manure storage structures (one foot for the older "L-shaped" structure and one foot for the newer square storage structure) to ensure compliance with the permit conditions.

Store dry manure in production buildings or in storage facilities or otherwise store or modify the site (e.g. berms buffers) in such a way as to prevent polluted runoff (e.g., located on relatively flat land, away from water bodies, wetlands, and wells, and/or surrounded by a berm or buffer). Provide adequate storage capacity for the typical quantity of manure generated over a 180-day period of time beginning December 1st of each year.

C. LIVESTOCK OPERATING PERMIT

The permittee is required to obtain and maintain a Livestock Operating Permit from the Maine DAFRR pursuant to Maine law, 7 M.R.S.A., §4204.

D. NUTRIENT MANAGEMENT PLAN

Upon issuance of this permit, the permittee is required to develop and implement a Nutrient Management Plan in accordance with the standards in Maine's DAFRR regulation, Chapter 565, §6. The Nutrient Management Plan must be updated at least once each year and must be approved by a certified nutrient management plan specialist at least every five years. The Nutrient Management Plans must be kept on-site and current at all times.

SPECIAL CONDITIONS

E. GENERAL FACILITY INSPECTIONS AND MONITORING

Inspection, monitoring and record keeping activities shall be conducted in accordance with the following:

1. Employee Training: Where employees are responsible for work activities that relate to permit compliance, those employees must be regularly trained or informed of any information regarding the proper operation and maintenance of the facility and waste disposal. Training shall include topics as appropriate such as land application of wastes, proper operation and maintenance of the facility, good housekeeping and material management practices, necessary record keeping requirements, and spill response and clean up. The permittee is responsible for determining and providing the appropriate training frequency for different levels of personnel and maintain records of the training provided.

2. Record Keeping and Internal Reporting Procedures. Incidents such as spills or overflows, along with information describing the pollution potential and quantity of the discharge shall be described in writing. Inspections and maintenance activities shall be documented.

3. Visual Inspections. The permittee shall inspect equipment and facility areas daily and during and subsequent to any rain event. Material handling areas shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Visual inspections of all manure and runoff storage structures, handling and distribution systems, feed storage operations other process systems or controls, and buffer strips shall be undertaken to ensure that all are in proper working order.

4. Site Inspection. A complete inspection of the facility shall be conducted by the farm manager and a report made documenting the findings of the inspection made at least once/year. The report shall be kept on-site and made available to DAFRR, DEP and EPA staff upon request.

5. All inspection reports and other record keeping required above must be kept current at all times and maintained at the facility.

6. If the operator of the farm chooses to self-record rainfall data then (see footnote #5 on page 9 of this permit) a rain gauge shall be maintained at the facility to record values for each 24-hour period.

SPECIAL CONDITIONS

E. GENERAL FACILITY INSPECTIONS AND MONITORING (cont'd)

7. Summary of Inspection and Monitoring Requirements:

PARAMETER	UNITS	FREQUENCY
Facility inspection[1]		
Lagoon or storage structure monitoring and inspection		
Freeboard[2]	Feet	Bi-Weekly
Structural integrity (i.e., visual inspection for the integrity of berms)[3]	N/A	Bi-Weekly
Fecal coliform bacteria/total kjeldahl nitrogen (TKN) as nitrogen (underdrain for square storage manure pit)	#colonies/100ml mg/L	1/Quarter[4]
Precipitation		
Rainfall[5]	Inches	Daily

Footnotes:

[1] A complete inspection of the facility shall be done and a report made annually.

[2] Bi-weekly (every two weeks) between February 1 and March 30 and the month of November of each calendar year. For lagoons or other liquid storage basins, report the water level as feet (to the nearest 1/10th of a foot) below the emergency overflow level. For solid manure storage structures, report the percentage of remaining storage capacity.

[3] Bi-weekly (every two weeks) between February 1 and March 30 and the month of November of each calendar year. Documentation of compliance with this requirement must be compiled in an inspection report to be kept at the facility.

[4] Second, third and fourth calendar quarters of each year.

[5] The permittee shall maintain a precipitation gauge at each storage facility and record the rainfall for each 24-hour period between March 1 and April 30 and November 1 through November 30 of each year or obtain daily precipitation records for said periods from other entities within a 25 miles radius of the farm.

SPECIAL CONDITIONS

E. GENERAL FACILITY INSPECTIONS AND MONITORING (cont'd)

8. Additional Monitoring Requirements

   Additional analysis: Upon request by the Maine DEP and or DAFRR, the permittee may be required to collect and analyze samples including but not limited to soils, surface water, ground water, and/or stored waste in a manner and frequency specified by Maine DEP and or DAFRR.

   Additional monitoring for some high risk operations: Upon notification by Maine DEP and DAFRR, the permittee may be required to conduct ambient monitoring of surface and/or groundwater. For example, facilities with historical compliance problems, especially large facilities, facilities with significant environmental concerns, or facilities impacting impaired water bodies.

F. SPRAY IRRIGATION OPERATIONAL PROCEDURES, LOGS AND REPORTS

Beginning upon issuance and lasting through November 15, 2006, the permittee is authorized to construct and operate a surface waste water disposal (spray irrigation) system. The system shall be limited to the open field to the south of the newest barn on the site. The permittee shall adhere to the following operational constraints:

1. The permittee shall be limited to a spray application rate of 1.0 inches per day (27,152 gallons/acre/day) and 2.5 inches per week (67,880 gal/acre/week.). Weekly is defined as a 7-day rolling average. A field's daily or weekly application rate is the total gallons sprayed over the applicable period of time divided by the size of the portion of the field(s) utilized. The permittee shall measure the flow of waste water to the irrigation area by a method approved by the Department prior to the commencement of operation of the system.

2. Suitable vegetative cover shall be maintained. Waste water may not be applied to areas without sufficient vegetation or ground cover as to prevent erosion or surface water runoff outside the designated boundaries of the spray field.

3. At least 10 inches of separation from the ground surface to the ground water table shall be present prior to spray irrigation.

4. No waste water shall be applied to the site following a rainfall accumulation exceeding 1.0 inches within the previous 24-hour period. A rain gauge shall be located on-site to monitor daily precipitation. The permittee shall also manage application rates by taking into consideration the forecast for rain events in the 48-hour period in the future.

5. The spray irrigation facilities shall be effectively maintained and operated at all times so that there is no discharge to surface waters or runoffoutside the designated spray site area.

SPECIAL CONDITIONS

F. SPRAY IRRIGATION OPERATIONAL PROCEDURES, LOGS AND REPORTS

6. The permittee shall at all times maintain in good working order and operate at maximum efficiency all waste water conveyance and control facilities. **Within one hour after start-up of the spray-irrigation system**, the permittee shall walk the spray-irrigation site or have other means to check the system for leakage in the piping system and determine if individual sprayheads and pump(s) are functioning as designed, and verify that application rates are appropriate for the existing site conditions. Should significant malfunctions or leaks be detected, the permittee must shut down the malfunctioning/leaking sections of the spray system and make necessary repairs before resuming operation. The permittee shall cease irrigation if runoff is observed outside the designated boundaries of the spray field.

7. **The permitte shall maintain a daily log** of all spray irrigation operations which records, the date, weather and soil conditions, rainfall, areas irrigated, volume sprayed (gallons), application rates (daily and weekly), and other relevant observations/comments from daily inspections. The log shall be in accordance with the format of the *"Spray Application Report By Week"* form provided as Attachment "A" of this permit. Copies of the log shall be maintained on site at all times for Department review and for farm personnel required to maintain said records.

8. No traffic or equipment shall be allowed in the spray-irrigation field except where installation occurs or where normal operations and maintenance are performed.

9. The Department shall be notified as soon as the permittee becomes aware of any threat to public health, unlicensed discharge of process waters or any malfunction that threatens the proper operation of the system. Notification shall be made in accordance with the Special Condition A(3) of this permit.

G. DRAINAGE SWALE CLEANING

On or before August 30, 2006, the permittee shall remove the existing manure contamination from the lower drainage swale (same swale as identified in the 8/29/05 Notice of Violation issued by the Department) that feeds into Martin Stream and dispose of it in accordance with applicable State and local rules and regulations. Removal shall be executed with minimum intrusion through the use of either a vactor truck or trash pump. Use of heavy equipment in a wetland must take place on matting and, if allowable, will require the prior approval of the Department's Bangor Regional Office staff.

SPECIAL CONDITION

H. MANURE STORAGE PIT ABANDOMENT OR REDUCED USE

Within 3 calendars days from the date in which the population of dairy cows falls below 50 animals, the permittee shall notify the Department in writing and state whether the population reduction is a temporary condition (less than 30 days) or for an extended period of time or permanent (greater than or equal to 30 days). If the reduction is temporary, no further action is necessary other than maintaining compliance with terms and conditions of this permit.

If the reduction in population is for an extended period of time or permanent, within 15 calendars days from the date in which the population of dairy cows falls below 50 animals, the permittee shall submit to the Department for review and approval, a written plan to remove and properly dispose of all manure (liquid and solid) accumulated at that time in the barns and two storage pits. **All manure must be removed from the barns and storage pits with 90 days from the population reduction.**

If the permittee intends to maintain a population of 50 animals or less for greater than 30 days, then within 30 days from the population reduction, the permittee shall submit a long term written Manure Management Plan to the Department for review and approval. This requirement is separate from the Nutrient Management Plan required by the Maine Department of Agriculture, Food and Rural Resources.

I. REOPENING OF PERMIT FOR MODIFICATIONS

Upon evaluation of any pertinent information obtained during the term of this permit indicating that the discharge(s) are causing, contributing or have a reasonable potential to cause or contribute to the surface waters or ground waters not to attain the standards of their assigned classifications, this permit may be modified, after notice to the permittee to: 1) establish effluent limits necessary to control specific pollutants; (2) require monitoring if results on file are inconclusive; or (3) change monitoring requirements or limitations based on new information.

J. SEVERABILITY

In the event that any provision, or part thereof, of this permit modification is declared to be unlawful by a reviewing court, the remainder of the permit shall remaining in full force and effect, and shall be construed and enforced in all aspects as if such unlawful provision, or part thereof, had been omitted, unless otherwise ordered by the court.

SPECIAL CONDITIONS

K. DEFINITIONS

1. Process-generated waste water or waste water means any waste water directly or indirectly used in the operation of a feedlot for any or all of the following: spillage or overflow from animal watering systems; washing, cleaning, or flushing pens, barns, manure pits or other feedlot facilities, feed storage facilities, direct contact swimming, washing or spray cooling of animals; and dust control and any precipitation which comes in contact with any manure or litter, bedding, or any other raw material or intermediate or final material or product used in or resulting from the production of animals or direct products (e.g., milk). Waste water also includes any precipitation that comes into contact with any manure, litter or bedding, or any other raw material or intermediate or final material or product used in or resulting from the production of animal or direct products (e.g., milk).

2. Retention facility or retention structures or waste water facility means all collection ditches, conduits and swales for the collection of runoff and waste water, and all basins, ponds and lagoons used to store wastes, waste waters and manure.

3. Storm water means storm water runoff or snow melt runoff that does not come into contact or co-mingle with process waste water as defined in Section H(a) of this permit.

Spray Application Report by Week **Attachment A** **Facility Name Country Acre Farm;**

WDL # W008242-5S-A-N (Month _____, Year _____) Weekly Application Rate _____ gallons/acre _____ inches)

Field Name/#	Effective Spray Area (Acres)	Weekly Limit (Gallons/Acre)	Actual Spray Application Rates (Gallons per Acre)					Number of Exceptions to Weekly Limit	Monthly Average
			Week 1	Week 2	Week 3	Week 4	Week 5		

Note: 1 acre-inch is equivalent to 27,150 gallons of liquid
27,150 gallons per acre is equivalent to 1.0 inch

Total Number of Exceptions

A spray-field's weekly application rate if the total gallons sprayed (Sunday through Saturday) divided by the size of the spray-field in acres or the size in acres of that portion of the spray field utilized.

Signature of Responsible Official: _____, Date _____

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

AND

MAINE WASTE DISCHARGE LICENSE

FACT SHEET

Date: **June 20, 2006**

PERMIT NUMBER: **ME0036821**
LICENSE NUMBER: **W008243-5S-A-N**

NAME AND ADDRESS OF APPLICANT:

COUNTRY ACRE FARM
P.O. Box 758
Hampden, Maine 04444

COUNTY: **Piscataquis County**

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

Moosehead Trail Road
Dixmont, Maine

RECEIVING WATER/CLASSIFICATION: **Ground Water/Class GW-A**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **Mr. Carl McCue**
(207) 862-2900
McCuellawllc@adelphia.me

1. APPLICATION SUMMARY

a. Application: The applicant has applied to the Maine DEP for a combination Maine Pollutant Discharge Elimination System (MEPDES) permit and Maine Waste Discharge License (WDL) to discharge storm water to Martin Stream and an adjacent wetland, Class A waterbodies and manage process waste waters that are generated by the operation of a concentrated animal feeding operation (CAFO) in Dixmont such that there are no discharges to surface waters. The permittee has requested the Department approve (on a temporary basis) the use of a surface waste water disposal system.

1. APPLICATION SUMMARY (cont'd)

b. Permit Summary: This permitting action is requiring the permittee to develop and implement a Nutrient Management Plan and obtain a Livestock Operation Permit (LOP) pursuant to Maine law, 7 M.R.S.A., §4204 and §4205 respectively, and in accordance with Maine Department of Agriculture, Food and Rural Resources (DAFRR) regulation Chapter 565, *Nutrient Management Rules,* §6 and §8 respectively.

c. History: The most recent relevant permitting/license and regulatory events include:

April, 1997 – Maine law, 7M.R.S.A., Chapter 747, *Nutrient Management Act* was enacted.

December 1998 – The Maine DAFRR adopted regulation Chapter 565, *Nutrient Management Rules*. It is noted the regulation was last amended on February 17, 2001.

June 8, 2000 – The Maine DEP and DAFRR entered into a Memorandum of Agreement entitled, *Coordination of the Maine Livestock Operating Permit Program and the Maine Pollutant Discharge Elimination System Permit Program in Regards to Concentrated Animal Feeding Operations*. The purpose of the agreement is intended to 1) establish a collaborative process between the DEP and DAFRR so as to better coordinate review of CAFO's, and 2) clarify the roles and responsibilities of the two agencies in regard to the permitting of CAFO's under DAFRR Livestock Operating Permit (LOP) program and DEP's MEPDES permit program.

January 12, 2001 - The State of Maine received authorization from the U.S. Environmental Protection Agency (EPA) to administer the National Pollutant Discharge Elimination System (NPDES) permitting program in Maine. From that date forward, the program has been referred to as the Maine Pollutant Discharge Elimination System (MEPDES) permitting program.

June 2005 – The Country Acre Farm developed a Nutrient Management Plan for their farm and the plan was approved by a certified Nutrient Management Plan specialist and reviewed and approved by DAFRR.

August 16,, 2005 – Personnel from Maine DAFRR and the Maine DEP conducted an on-site inspection at the Country Acre Farm. The primary objective of the site inspection was to determine whether the farm is considered a CAFO pursuant to Department rule Chapter 521, *Applications For Waste Discharge Licenses*, §6. The inspection determined that the farm was a medium CAFO that required a MEPDES permit.

August 29, 2005 – The Department issued a Notice of Violation (NOV) to the Country Acre Farm for discharge(s) of manure to Martin Stream.

October 3, 2005 – The Country Acre Farm submitted an application to the DEP and DAFRR for a new MEPDES permit and LOP.

1. APPLICATION SUMMARY (cont'd)

November 8, 2005 – The DAFRR issued a letter to the permittee indicating the application submitted on October 3, 2005 was deficient and listed eight informational items that needed to be addressed/submitted in order for the DAFRR to accept the application as complete for processing.

May 4, 2006 – Inspection personnel from Maine DEP and the USEPA conducted an on-site inspection at the Country Acre Farm. The site inspection was in response to a number of complaints from the public regarding discharges of manure to Martin Stream, a Class A waterbody adjacent to the farm.

June19, 2006 – The permittee submitted a revised application to the DEP and DAFRR.

b. Source Description – The Country Acre Farm has been identified as a CAFO as the facility has at least 200 mature dairy cattle and pollutants are discharged into waters of the State that originate outside of and pass over, across, or through or otherwise come into direct contact with the animals confined in the operation. The animals are confined on a year-round basis in five large barns with open-air side walls and fully covered with roofs. All storm water runoff and waste waters generated in the vicinity of the barns and milking parlor are directed to two manure storage pits. One pit (the oldest) is "L-shaped" and serves four (4) older barns that can collectively house approximately 350 animals and the newest square pit (on-line in the fall of 2005) serves one barn (the largest single barn constructed in 2004) that can house approximately 350 animals. The inspections by DAFRR, DEP and the USEPA indicated that the nearest surface water (Martin Stream) is approximately 300 feet from the older "L-shape" storage pit and 500 feet from the new square storage pit. See Attachment A of this Fact Sheet for aerial photographs by the Department for the configuration of the barns, storage pits and the location of Martin Stream. The DAFRR has made a determination that the two storage lagoons are designed and capable of capturing a 25 year, 24-hour rainfall event. Manure is spread on various fields owned and or leased by the Country Acre Farm as permitted by the Nutrient Management Law.

Due to high precipitation events during calendar years 2005 and 2006, the permittee has had a difficulty accessing fields to spread manure in accordance with the Nutrient Management Plan for the farm. As a result, the newest storage pit was put on-line prior to final acceptance by the designers (Natural Resources Conservation Service). Manure from the older pit was pumped to the newer pit in the fall of 2005 prior to the permittee pumping out accumulated precipitation (approximately 4 feet) in the new pit. As a result, the pit walls were not properly sealed and leakage has been on-going since and the precipitation is occupying capacity that was reserved for solid manure. The permittee has requested the Department approve, on a temporary basis (late summer through late fall 2006) the construction of a surface waste water disposal system to spray irrigate the

1. APPLICATION SUMMARY (cont'd)

supernatant from the new pit onto an open field to the south of newest barn on the farm. Disposing of approximately four feet of water in the pit will provide the permittee with the intended storage capacity for solid manure and mitigate the risk of overtopping of the pits and discharging to the adjacent wetland and or Martin Stream.

Slow rate land irrigation treatment is an environmentally sound and appropriate technology for best practicable treatment and disposal of sanitary like waste waters. The soils and vegetation within the irrigation area will provide adequate filtration and absorption to preserve the integrity of the soil, and both the surface and groundwater quality in the area.

2. CONDITIONS OF PERMITS

Maine law, 38 M.R.S.A. Section 414-A, requires that the effluent limitations prescribed for discharges, including, but not limited to, effluent toxicity, require application of best practicable treatment (BPT), be consistent with the U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in Maine's Surface Water Classification System. In addition, 38 M.R.S.A., Section 420 and Department rule 06-096 CMR Chapter 530, *Surface Water Toxics Control Program,* require the regulation of toxic substances not to exceed levels set forth in Department rule 06-096 CMR Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants*, and that ensure safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected.

3. RECEIVING WATER QUALITY STANDARDS

Pursuant to Maine law, 38 M.R.S.A., §467(4)(H)(2)(d) classifies Martin Stream (on the northern perimeter of the Country Acre Farm's barn yard), the adjacent wetland classified as being of special significance and its tributaries upstream of the Ridge Road in Plymouth as Class A water ways. Maine law 38 M.R.S.A., §465(2) contains the standards for waters classified as Class A. Class A waters shall be of such quality that they are suitable for the designated uses of drinking water after disinfection; fishing; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation, except as prohibited under Title 12, section 403; and navigation; and as habitat for fish and other aquatic life. The habitat shall be characterized as natural.

The dissolved oxygen content of Class A waters shall be not less than 7 parts per million or 75% of saturation, whichever is higher. The aquatic life and bacteria content of Class A waters shall be as naturally occurs. It is noted, Maine law, 38 M.R.S.A., §464(4)(c) states "Where natural conditions, but not limited to, marshes, bogs, and abnormal concentrations of wildlife cause the dissolved oxygen or other water quality criteria to fall below the minmum standards specified in sections 465, 465-A and 465-B, those waters shall not be considered to be failing to attain their classification because of those natural conditions."

3. RECEIVING WATER QUALITY STANDARDS (cont'd)

Except as provided in this paragraph, direct discharges to these waters licensed after January 1, 1986 are permitted only if, in addition to satisfying all the requirements of this article, the discharged effluent will be equal to or better than the existing water quality of the receiving waters. Prior to issuing a discharge license, the department shall require the applicant to objectively demonstrate to the department's satisfaction that the discharge is necessary and that there are no other reasonable alternatives available. Discharges into waters of this classification licensed prior to January 1, 1986 are allowed to continue only until practical alternatives exist. It is noted the discharge(s) from the Country Acre Farm have never been license by the DEP.

Pursuant to Maine law 38 M.R.S.A, §D &E state that storm water discharges to Class A waters must be in compliance with state and local requirements and material may not be deposited on the banks of Class A waters in any manner that makes transfer of pollutants into the waters likely.

4. RECEIVING WATER QUALITY CONDITIONS

A document entitled, The State of Maine, Department of Environmental Protection, 2002 Integrated Water Quality Monitoring and Assessment Report, published by the Department, pursuant to Section 305(b) of the Federal Water Pollution Control Act, does not contain any information that indicates that the ground water in the vicinity of the Country Acre Farm is not attaining the standards of their assigned classifications. As for Martin Stream, the Department has visual information and documented bacteria counts in Martin Stream above and below the Country Acre Farm that indicates the facility has periodically adversely impacted the stream by the discharge of manure laden storm water and discharges of liquefied manure originating from the manure storage pit from the Country Acre Farm.

5. APPLICABLE LAWS, RULES AND/OR REGULATIONS

a. Pursuant to Section 502(14) of the federal Water Pollution Control Act (Clean Water Act), CAFO's are defined as point source dischargers.

b. Maine law 38 M.R.S.A. §413 states that "No person may directly or indirectly discharge or have cause to be discharged any pollutant without first obtaining a license therefor from the Department."

c. Maine law 38 M.R.S.A. §413(1-A) states in part that "No person shall install, operate or maintain a surface waste water disposal system without first obtaining a therefore from the department, ..."

5. APPLICABLE LAWS, RULES AND/OR REGULATIONS (cont'd)

d. Maine DEP rule, Chapter 521, *Applications For Waste Discharge Licenses*, §6(a) states "Permit requirement. Concentrated animal feeding operations are point sources subject to the NPDES permit program. The Department will consult with the Department of Agriculture and all applications for concentrated animal feeding operations in order to consolidate permitting requirements where feasible." It is noted the rule references federal regulations found at 40 CFR Part 122.23 requiring CAFO's to obtain a federal NPDES permit. However, given that the USEPA has authorized the State of Maine to administer the NPDES permit program in Maine, MEPDES permits will be issued to CAFO's.

   Maine DEP Chapter 521, §6(b)(3)-Appendix B establishes the criteria for determining a CAFO. The Country Acre Farm is categorically considered a CAFO as the facility has at least 200 mature dairy cattle and pollutants are discharged into waters of the State which originate outside of and pass over, across, or through or otherwise come into direct contact with the animals confined in the operation.

e. Maine DEP rule, Chapter 550, *Discontinuance of Waste Water Treatment Lagoons,* establishes a process in which a permittee must properly dispose of waste water and close-out the laggons in the event of temporary or permanent discontinuance of said system.

f. Federal regulation 40 CFR Part 412 – *Feedlots Point Source Category*, establishes effluent limitations and guidelines representing best practicable control technology currently available (BPT) and best available technology economically achievable (BAT). BPT and BAT for CAFO's is no discharge of process waste water pollutants to navigable waters where process waste waters are defined as any process generated waste and any precipitation (rain or snow) which comes into contact with any manure, litter or bedding, or any other raw material or intermediate or final material or product used in or resulting from the production of animals or poultry or direct products (e.g. milk, eggs).

g. Maine law, 7 M.R.S.A, §4204(H)(2) establishes the criteria for who must develop and implement a Nutrient Management Plan. CAFO's meet applicable criteria under this section. Maine DAFRR regulation Chapter 565, *Nutrient Management Rules*, §6(1) establishes the standards for Nutrient Management Plans required under Maine law, 7 M.R.S.A, §4204. Chapter 565, §6(2) requires Nutrient Management Plans to be updated at least once each year and must be approved by a certified nutrient management plan specialist at least every five years.

h. Maine law, 7 M.R.S.A, §4205(A) requires CAFO's to obtain a Livestock Operating Permit (LOP). Maine DAFRR regulation Chapter 565, *Nutrient Management Rules*, §8(1)(a) requires the owner or operator of a CAFO to obtain a LOP or provisional LOP from the DAFRR.

6. GENERAL FACILITY INSPECTIONS AND MONITORING

The inspections, monitoring and recordkeeping required by this permitting action were developed based on guidance provided by the USEPA to promote consistency with nationwide permitting of CAFOs. In addition, the DEP consulted with the Maine DAFRR to develop inspections, monitoring and recordkeeping that would serve both agencies program requirements.

7. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

As permitted, the Department has determined the existing water uses will be maintained and protected and the discharge will not cause or contribute to the failure of the ground water or surface water bodies to meet standards for Class GW-A or Class A classification.

8. PUBLIC COMMENTS

Public notice of this application was made in the Bangor Daily News newspaper on or about June 20, 2006. The Department receives public comments on an application until the date a final agency action is taken on that application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to Chapter 522 of the Department's rules.

9. DEPARTMENT CONTACTS

Additional information concerning this permitting action may be obtained from and written comments should be sent to:

Attn: Nutrient Management Program
Maine Department of Agriculture, Food and Rural Resources
Office of Agriculture, Natural and Rural Resources
28 State House Station
Augusta, Maine 04333-0028
Telephone: (207)-287-1132

Attn: MEPDES Permitting Coordinator
Maine Department of Environmental Protection
Bureau of Land and Water Quality
Division of Water Quality Management
17 State House Station
Augusta, Maine 04333-0017 Telephone: (207) 287-3901

10. RESPONSE TO COMMENTS

During the period of June 20, 2006 through the date of issuance of this permit, the Department solicited comments on the proposed draft Maine Pollutant Discharge Elimination System permit to be issued for the Country Acre Farm.

Comment #1 - The Department received a written comment (via e-mail) from the permittee requesting authorization to construct and operate a temporary surface waste water disposal (spray irrigation) system. Authorizing the use of said system will benefit the environment by allowing the permittee to free up approximately 160,000 ft^3 of capacity in the newest storage pit that is currently occupied by precipitation that has accumulated over last 18 months. Freeing up this capacity will enable farm personnel to convey manure between pits and lower the risk of overtopping the storage pits between spreading seasons.

Response #1 – The Department concurs that freeing up capacity in the storage pit by spray irrigating relatively clean water on an open field is better environmentally than continuing to run the risk of overtopping the storage pits. Therefore, the Department has modified the final permit to include a Special Condition F, *Spray Irrigation Operational Procedures, Logs and Reports.* The use of the spray irrigation system is only valid from the date of issuance of the permit through November 15, 2006.

The Department also acknowledges a letter date July 6, 2006 from the Team Leader for the Friends of Martin Stream and Plymouth Pond. The letter did not request any changes to the permit.

Spray Application Report by Week Attachment A Facility Name Country Acre Farm;

WDL # W008243-5S-A-N (Month _____, Year _____) Weekly Application Rate _____ gallons/acre _____ inches)

Field Name/#	Effective Spray Area (Acres)	Weekly Limit (Gallons/Acre)	Actual Spray Application Rates (Gallons per Acre)					Number of Exceptions to Weekly Limit	Monthly Average
			Week 1	Week 2	Week 3	Week 4	Week 5		

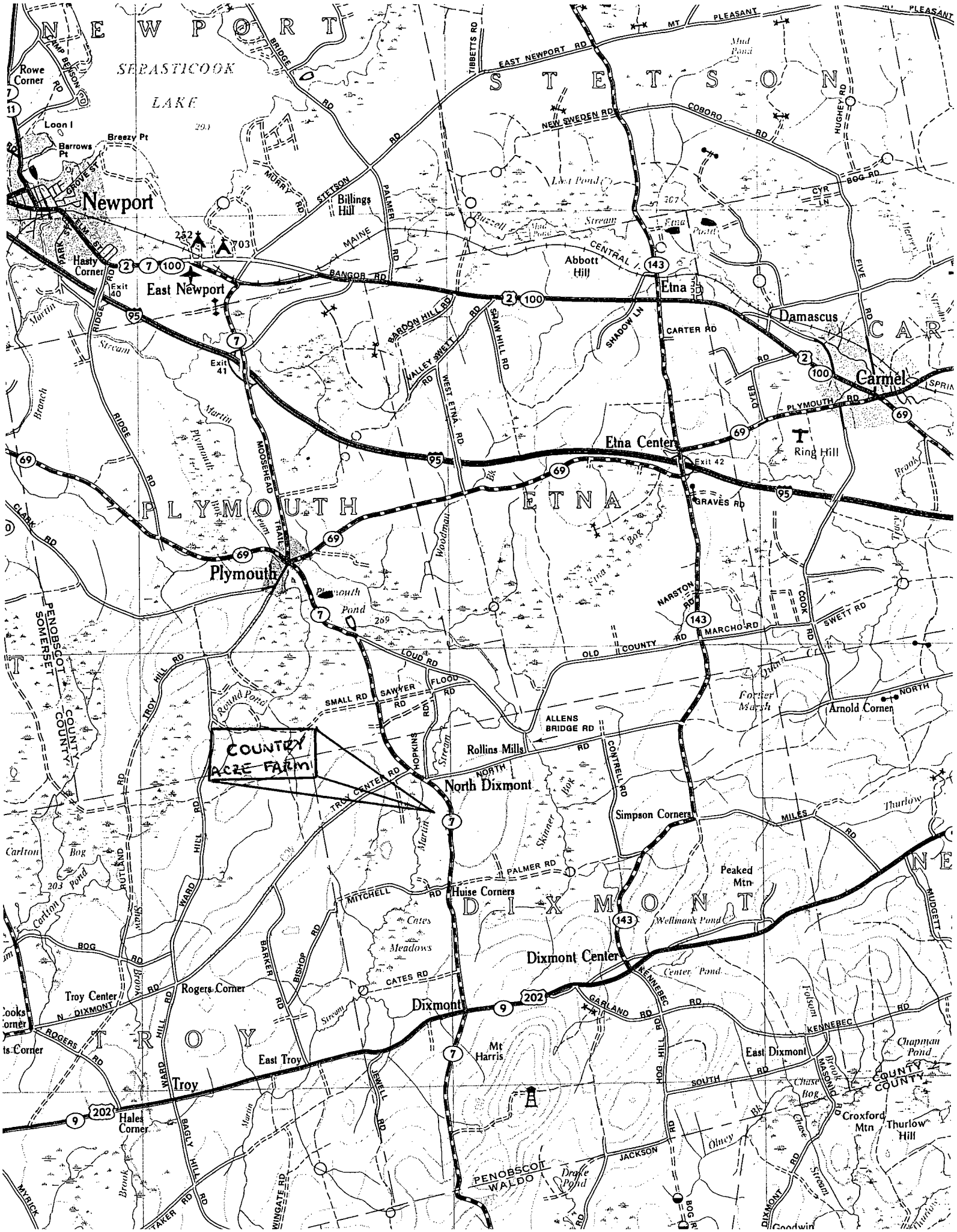
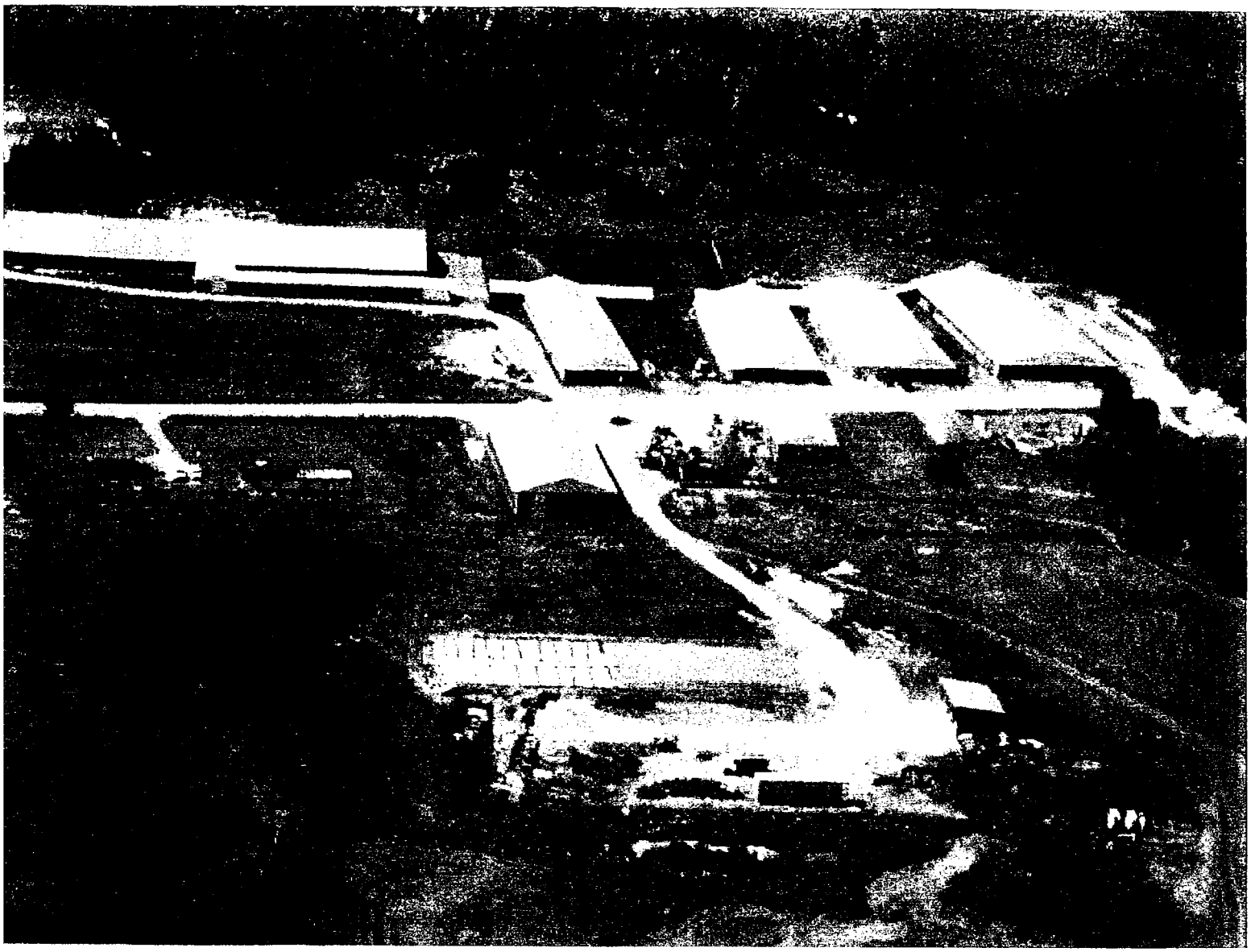
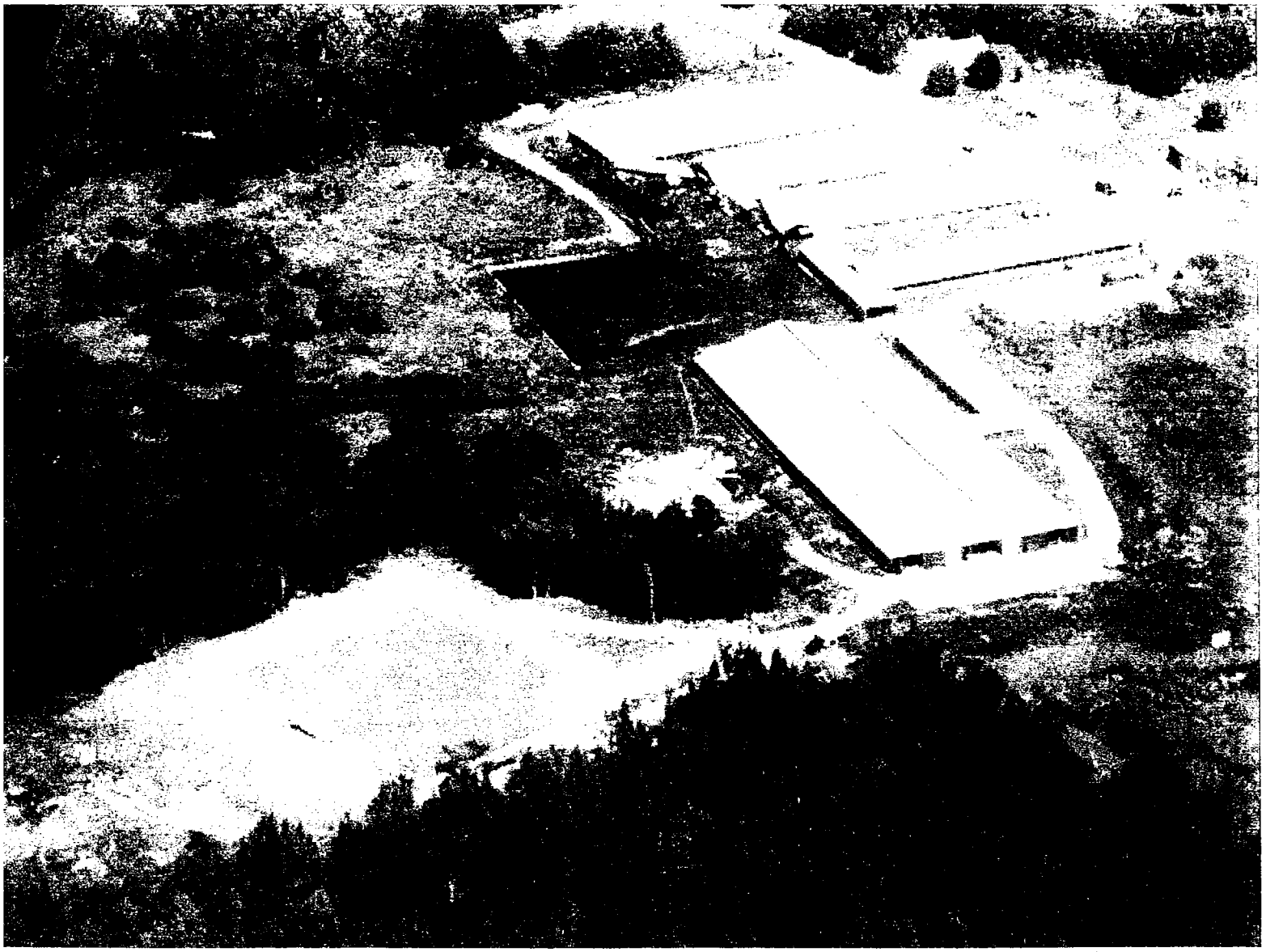
Note: 1 acre-inch is equivalent to 27,150 gallons of liquid
27,150 gallons per acre is equivalent to 1.0 inch

Total Number of Exceptions

A spray-field's weekly application rate if the total gallons sprayed (Sunday through Saturday) divided by the size of the spray-field in acres or the size in acres of that portion of the spray field utilized.

Signature of Responsible Official: _____, Date _____

ATTACHMENT A



NEWPORT
SEBASTICOOK LAKE
Rowe Corner
Loon I
Barrows Pt
Breezy Pt
Newport
Hasty Corner
East Newport
Billings Hill
STETSON
EAST NEWPORT RD
MT PLEASANT
NEW SWEDEN RD
COBORO RD
HUGHEY RD
BOG RD
CYR LN
Lost Pond
Buzzell Stream
Etna Pond
Abbott Hill
Etna
Damascus
CARTER RD
SHADOW LN
CENTRAL
BANGOR RD
MAINE
PALMER RD
STETSON RD
MURRY RD
BRIDGE RD
TIBBETTS RD
BARDON HILL RD
VALLEY SWETT RD
SHAW HILL RD
WEST ETNA RD
Exit 40
Exit 41
Exit 42
Carmel
PLYMOUTH RD
DYER RD
Ring Hill
Etna Center
GRAVES RD
PLYMOUTH
ETNA
MOOSEHEAD TRAIL
RIDGE RD
Martin Stream
Plymouth Bog
Plymouth
Plymouth Pond
CLARK RD
PENOBSCOT COUNTY
SOMERSET COUNTY
TROY HILL RD
Round Pond
LOUD RD
SMALL RD
SAWYER RD
FLOOD RD
HOPKINS RD
Woodman Bk
NARSTON RD
MARCHO RD
OLD COUNTY RD
COOK RD
SWETT RD
Arnold Corner
NORTH
Former Marsh
ALLENS BRIDGE RD
Rollins Mills
CONTRELL RD
COUNTRY ACRE FARM
TROY CENTER RD
North Dixmont
Skinner Bog
Simpson Corners
MILES RD
Thurlow
Carlton Bog
Carlton Pond
RUTLAND RD
WARD HILL RD
PALMER RD
MITCHELL RD
Huise Corners
Peaked Mtn
DIXMONT
Wellman Pond
Cates Meadows
BOG RD
BARKER RD
BISHOP RD
Dixmont Center
Center Pond
CATES RD
Troy Center
Rogers Corner
N DIXMONT RD
Dixmont
GARLAND RD
KENNEBEC RD
Folsom Brook
Cooks Corner
ROGERS RD
TROY
East Troy
Mt Harris
East Dixmont
Chapman Pond
Troy
SOUTH RD
MASONIC RD
Chase Bog
Croxford Mtn
Thurlow Hill
Hales Corner
BAGLY HILL RD
JEWELL RD
JACKSON RD
Olney Bk
PENOBSCOT
WALDO
Drake Pond
DIXMONT RD
Goodwin
MYRICK
TAKER RD
WINGATE RD