COMMONWEALTH of VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY
PERMIT
TO WITHDRAW GROUNDWATER
(FOR USE IN GROUNDWATER MANAGEMENT AREAS)

Permit Number: GW0060501
Effective Date: June 1, 2014
Expiration Date: May 31, 2024

Pursuant to Section 62.1-256 of the Ground Water Management Act of 1992 (Chapter 25, Title 62.1 of the Code of Virginia) and the Groundwater Withdrawal Regulation (9VAC25-610-10 et seq.), the State Water Control Board hereby authorizes

Permittee: Eleanor Bull Lambertson

Address: P.O. Box 155
Eastville, VA 23347

Facility: C&H Farms, Inc.

to withdraw and use Groundwater in accordance with this permit and the application received August 24, 2010 and subsequently amended.

The permittee is authorized to withdraw 72,000,000 gallons during the 10 year permit term.

The permittee shall comply with all requirements contained on this cover page, Part I - Permit Standards, Limitations, and Conditions, Part II - Special Conditions, the Ground Water Management Act of 1992 (Chapter 25, Title 62.1 of the Code of Virginia), and the Groundwater Withdrawal Regulation (9VAC25-610-10 et seq.). Nothing in this permit or this regulation shall be construed to relieve the permittee of the duty to comply with all applicable Federal and State statutes and regulations.

The permitted withdrawal will be used as a water supply for irrigation on the permittee's property and for cleaning and filling farm equipment. Other beneficial uses are not authorized by this permit.

Any noncompliance with permit conditions, the Groundwater Withdrawal Regulation (9VAC25-610-10 et seq.) or the Ground Water Management Act of 1992 (Chapter 25, Title 62.1 of the Code of Virginia) is a violation of the regulation and law, and is grounds for enforcement action, permit termination, revocation, amendment, or denial of a permit renewal application.

By direction of the State Water control Board, this Permit is granted by:

Signed _____ Date 5/19/14

For the State Water Control Board

Part I
Permit Standards, Limitations and Conditions

1. The withdrawal of groundwater shall originate from the following withdrawal points:

Owner Well Name	DEQ Well #	Depth	Aquifer	Latitude	Longitude
Well #1	165-00422	172'	Upper Yorktown-Eastover	37°20'55.0"	75°58'09.7"
Well #2	165-00423	172'	Upper Yorktown-Eastover	37°21'03.4"	75°58'13.9"

2. Withdrawals from the well system are limited as follows:

   In a calendar month: Total pumpage from these wells shall not exceed 3,000,000 gallons. The permittee shall report any amount in excess of the monthly withdrawal limit by the fifth day of the month following the month of over withdrawal.

   In a calendar year: Total pumpage from these wells shall not exceed 15,000,000 gallons. The permittee shall report any amount in excess of the annual withdrawal limit by the fifth day of the month following the month of exceeding this limit.

3. Water use from each well and total system water use shall be recorded monthly and reported on forms provided by the Department of Environmental Quality (Department) to the Groundwater Withdrawal Permitting Program by the tenth day of each January, April, July and October for the respective previous standard quarter. Records of water use shall be maintained by the permittee as required in Section 9VAC25-610-130(F).

4. Permitted users shall install in-line totalizing flow meters to read gallons, cubic feet or cubic meters on each well prior to beginning the permitted use. Meters shall be tested in accordance with American Water Works Association (AWWA) Manual M-6, "Water Meters - Selection, Installation, Testing, and Maintenance". Such meters shall produce volume determinations within plus or minus 10% of actual flows. A defective meter or other device must be repaired or replaced within 30 days. A defective meter is not grounds for not reporting withdrawals. During any period when a meter is defective generally accepted engineering methods shall be used to estimate withdrawals and the period during which the meter was defective must be clearly identified in groundwater withdrawal reports.

5. Each permitted well shall be equipped in a manner such that water levels can be measured during pumping and non-pumping periods without dismantling any equipment. Any opening for tape measurement of water levels shall have an inside diameter of 0.5 inches and be sealed by a removable plug or cap. The permittee shall provide a tap for taking raw water samples from each permitted well.

6. The permittee shall not place a pump or water intake device lower than the top of the uppermost confined aquifer that a well utilizes as a groundwater source or lower than the bottom of an unconfined aquifer that a well utilizes as a groundwater source.

7. Each well that is included in this groundwater withdrawal permit shall have affixed to the well casing, in a prominent place, a permanent well identification plate that records the Department's well identification number, the groundwater withdrawal permit number, the total depth of the well and the screened intervals in the well, at a minimum. Such well identification plates shall be in a format specified by the Department and are available from the Department.

8. The Water Conservation and Management Plan as described in the application received August 24, 2010 and subsequently amended is incorporated into this permit and included as Attachment A. Requirements in the Plan shall have the same effect as any condition contained in this permit and may be enforced as such. Records of activities conducted pursuant to the Plan are to be submitted to Department upon request.

9. This permit may be reopened for the purpose of amending the conditions of the permit to meet new regulatory standards duly adopted by the State Water Control Board (Board).

10. A new permit application must be submitted 270 days before the expiration date of this permit.

11. A new permit application must be submitted 270 days prior to any proposed modification to this permit that will result in an increase of withdrawal above permitted limits or violate the terms and conditions of this permit.

12. This permit may be reopened for amendment, transfer, or revocation as described in Part VI of the Groundwater Withdrawal Regulations (9VAC25-610-290 through 9VAC25-610-330).

13. The permittee must notify the Department in writing and obtain staff approval of any change in the status, construction or pump setting of wells included in this permit. A revised GW-2 form must be submitted to the Department within 30 days in the event that the physical construction of a well is altered or the pump setting in the well is changed.

14. The permittee must notify the Department in writing of any change of contact person, address, or phone number that is contained in the application received August 24, 2010.

15. Upon presentation of credentials the Board or Department, or any duly authorized agent, shall have the power to enter, at reasonable times and under reasonable circumstances, any establishment or upon any property, public or private, located anywhere in the Commonwealth for the purposes of obtaining information, conducting surveys or inspections, or inspecting wells and springs to ensure compliance with any permits, standards, policies, rules, regulations, rulings and special orders which the Board or Department may adopt, issue or establish to carry out the provisions of the Ground Water Management Act of 1992 and the Groundwater Withdrawal Regulation.

Part II
Special Conditions

1. **Mitigation Plan**
The Mitigation Plan, as described in the application received August 24, 2010 and subsequently amended, is incorporated into this permit and included as Attachment B. Requirements in the Mitigation Plan and subsequent revisions shall have the same effect as any condition contained in this permit and may be enforced as such.

2. **Additional Wells**
A minor amendment to this permit must be made to include additional wells. Additional wells may be permitted under a minor amendment if the total withdrawal does not exceed the permitted amount contained in this permit, the withdrawal from all additional wells originates from the Upper Yorktown-Eastover Aquifer, and the location of the wells are approved by Department staff prior to construction. Additionally, a complete suite of geophysical logs (Spontaneous Potential, Single Point Resistance, 16/64 Short and Long Normal, Natural Gamma) shall be submitted to the Groundwater Withdrawal Permitting Program prior to setting the pump intake.

3. **Pump Intake Settings**
Pump settings in individual wells are limited as follows:

Owner Well Name	DEQ Well#	Max Pump Setting (ft below land surface)
Well #1	165-00422	145
Well #2	165-00423	145

The permittee may provide additional information regarding the depth of the top of the Upper Yorktown-Eastover Aquifer to justify pump settings different from those listed above. Any change in the pump settings must receive prior approval by staff of the Department of Environmental Quality and be included in this permit as a minor amendment.

4. **Permit Reopener**
This permit may be reopened if the issuance of groundwater withdrawal permits required by the Ground Water Management Act of 1992 for existing permitted or certificated users indicate that the basis used for predicting compliance with regulatory drawdown criteria was inaccurate.

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY

Quarter 1 2 3 4

Quarterly Ground Water Withdrawal Report

Name of Facility
C&H Farms, Inc
Owner: Eleanor Bull Labmertson
Address P.O. Box 155
County/~~City~~: Northampton

Name of Operator _____
Position/Title _____
Signature _____ Date _____
Phone _____
Permit # GW0060501 (Expires May 31, 2024)
Note: New Application Due – September 4, 2023

Meter Readings are in _____ (gallons, 100's or 1000's of gallons, cubic feet, etc.)

Month of _____ Year of _____ Total Year to Date from Previous Quarter [ ]

Owner Well Number	DEQ Well Number and VWUDS MPID Number	Present Reading	Previous Reading	Total Gallons
Well #1	165-00422 372055075581001			0
Well #2	165-00423 372102075581401			0
			Total Gallons This Month	0
			Total Gallons Year to Date	0

Month of _____ Year of _____

Owner Well Number	DEQ Well Number and VWUDS MPID Number	Present Reading	Previous Reading	Total Gallons
Well #1	165-00422 372055075581001			0
Well #2	165-00423 372102075581401			0
			Total Gallons This Month	0
			Total Gallons Year to Date	0

Month of _____ Year of _____

Owner Well Number	DEQ Well Number and VWUDS MPID Number	Present Reading	Previous Reading	Total Gallons
Well #1	165-00422 372055075581001			0
Well #2	165-00423 372102075581401			0
			Total Gallons This Month	0
			Total Gallons Year to Date	0

ATTACHMENT A

WATER CONSERVATION AND MANAGEMENT PLAN

ATTACHMENT B

MITIGATION PLAN

Water Conservation and Management Plan

Land Preparation:

Certain farming practices can help aid in the conservation of water. Cultivation of the land before irrigation is one of these practices. This practice of loosing and stirring up the soil so that water absorption happen more quickly prevents the water from turning into runoff.

Another practice is drip irrigation.

Irrigation by drip has become a very important water management tool . By burying The drip tape under the plants the water is ready available. The need for irrigation Is determined by the use of Tensiometers and Hydrosense which determine the moisture content of the soil.

The irrigation schedule is determined by crop management guides which gives the information on how frequently and how much to irrigate. Small plants do not need as much water as a fully mature plant. The water requirements of a mature plant is supporting the development of fruit , requires considerably more water. Different soil type hold water longer than others, Nimme sandy loam hold longer than Bojac sandy loam does. Our irrigation schedules are adjusted to take these soil into consideration.

Enviromental factors constantly alter the irrigation schedules. Early morning and night Irrigation is a important step in water conservation. Watering at these times slow down the evaporation rate , thus requiring less water to be applied at one time. Timing irrigation so that these water saving effects can be performed while at the same time providing the plant with ample nutrition to continue prospering during their growing period.

Water saving practices used when irrigating

A. Drip irrigation is used on the Bull Farm. By putting the drip tape under the Plastic it reduces water evaporation which means using less water.

B. Pump Station Inspections

Transporting the water from its source to the irrigation system is one main conservation issue. The water is drawn from the Yorktown Middle Aquifer Grounder will be pumped from 2 , 6" production wells DEQ well #1 (165-00422) and DEQ well #2 (165-00423) and pumped to the system through PVC pipes. When chosen, these pipes were slected because of their conservation and sturdy nature. They are buried underground, there is hardly any risk of puncturing which makes them leak proof.

The equipment used to transport the water for irrigation are 2 electric 10hp submersible pumps. DEQ well#1 (165-00422) is set at125ft and DEQ well #2 (165-423) is set at 130 ft. . These pumps do not start and stop automatically. An operator who is the farmer , starts these pumps after checking all system that

lead do and from the pump. The operator checks the water pressure and the flow meter and checks visually for leaks every time the pumps are irrigating. These checks are done 4-5 times a day. The pumps are equipped with a high and low pressure gauges. Even a Small drop or high pressure will shut off pumps. Leaks are repaired immediately.

C: Water conveyance:

The water is supplied by and 6" 100psi pipe. These pipe either seal 100% are Blow apart. When this happens the pump, has been designed with safety switch which will cut pump off and stop water flow.

Leaks are detected though visual inspection, as noted above. The operator also started ,checks the water pressure and visually checks for leaks ever time the pumps are working. This done 1-5 times a day,and leaks or irregularties are repaired immediately by the operator..

D: Irrigation system inspections:

Ispections of the connections between the supply pipe and the drip tape are made visually by the operator each time the system is used.

The operator determines that the system is set properly by consulting the manual and tape spec. Field length are known to the operator so they apply the correct amount of water to the particular crop in the field.

Inspections are performed each time the system on and at lease hourly during its use. Written records of each incident are not maintained.

E: Irrigation system control equipment:

This system is designed to be started manually. It is operated by 2 -10 hp electric pumps These units are designed with safety shut off switches that sense water pressure decline or rise . Such build in safety system would shut down water flow in case of a pipe or coupling break. Everything shut down , water loss and flooded fields are no issue.

The equipment is inspected visually and the gauages tell what the operator need to know. These inspections are made so frequently and repairs are made immediately , no records are maintained.

F: Water control structures for runoff :

Each of the fields have buffer strips of grass to contain water. These strips allow Water to soak in instead of becoming runoff. There are no potential water reuse at this time.

Water use education program:

Education is a major factor in utilizing the water management plan. C@ H Farms has No seasonal employee. Myself and son are the main operator with over 30 years exp. And extensively trained in water pump usage and operatoion.

Water use reduction during water shortage emergencies:

If the local governing body or the Director of DEQ delcares manadatory water use reduction during water shortages emergencies, the operator, James Hopper will comply with tht water usage restrictions that are imposed. Area of impact of the proposed withdrawal to be done by DEQ staff

DEQ GROUND WATER WITHDRAWAL PERMIT

OWNER NAME Eleanor Bull Lambertson

FACILITY C&H Farms

LOCATION Eastville Va.

INTRODUCTION

On 8-16-2010 C&H Farms submitted a Ground Water Withdrawal Permit Application to the Virginia Department of Environmental Quality (DEQ) to withdrawal ground water . Ground water withdrawal associated with this permit will be utilized to grow vegetable.

The purpose of this Mitigation Plan is to proved existing ground water usera a method to resolve claim that may arise due to the impact of the well fields from the withdrawal from C&H Farms well fields.

Predicted drawdown of water levels due to the withdrawal from the Upper Yorktown Eastover Aquifer

Modeled impacts , as shown on the attached maps, extend beyond the boundary of the C&H Farms facility. Due to these findings, C&H Farms recognizes that there will be a rebuttal presumption that the water level declines adverse impacts to existing ground water users within the area of impact are due to this withdrawal.

Claims may be made by ground water users outside this area, however,ther is a rebuttal presumption that C&H Farms has not caused the adverse impact. C&H Farms proposes this plan to mitigate impacts to existing users and excludes impacts to wells constructed after the effective of this permit.

CLAIMANT REQUIREMENTS

To initiate a claim , the claimant must provide notification of the claim to the following address.

Contact Name James Hopper

Permittee Name Eleanor Bull Lambertson

City,State,Zipe Code: Eastville Va. 23347

The claim must include the following information (a) a deed or other available Evidence that the claimant is the owner of the well and the well was constructed and operated prior to the effective date of the permit;(b) all available information related to well construction , water levels, historic yield, water quality, and the exact location of the well sufficient to allow C&H Farms to locate the well on the claimant property;(c) the reasons the claimant believes that the C & H Farms withdrawal has caused an adverse impact on the claimant wells.

CLAIM RESOLUTION

C&H Farms will review any claim within five (5) business days. If C&H Farms Determines that no rebuttal will be made and accept the claim as valid C&H Farms Will notify the claimant and will implement mitigation thirty (30) business days. If the claim is not accepted as valid , C&H Farms will notify the claimant that (a) the claim is denied or (b) that additional documentation from the claimant is required in order to evaluate the claim. Within (15) business days of receiving additional documentation from the claimant ,C&H Farms will notify the claimant (a) that C&H Farms agrees to mitigate or (b) the claim is denied the claimant will be notified that the clamant may request the claim be evaluated by a three (3) member committee. This committee will consist of one (1) representative selected by C & H Farm , one (1) representative selected by the claimant, one (1) representative mutually agreed upon by the claimant and C&H Farms.

Any claimant requesting that a claim be evaluated by the committee should Provide the name and address of their representative to C& H Farm .
Within five (5) business days of receipt of such notification, C& H Farms will notify the claimant and claimants representative of the identity of C&H Farms representative and instruct the representatives to select a third representative. Within ten (10) business days.

Representatives should be a professional engineer or hydrogeology's with experience In the field of ground water hydrology. C&H Farms agrees to reimburse the members of the committee for reasonable time spent, at a rate prevailing in the area for experts in the above listed fields, and for direct cost incurred in administering the plan. The claimant may , at his or her portion , choose to provide the reimbursement for the member of the committee selected by the claimant and up to half of the reimbursement for the mutual representative.

Within (10) business days of the selection of the third representative, the committee will establish a reasonable deadline for submission of all documentation it needs to evaluate the claim. Both the claimant and C&H Farms will abide by this deadline.

Within fifteen (15) business days of receipt of documentation, the committee will evaluate the claim and reach a decision by majority vote . The committee will notify the claimant regarding its decision to (a) deny or (b) approve the claim. If the claim is approve ,C&H Farms will mitigate the adverse impact within (30) business days of making decision of as soon as practical. If the claim is denied by the committee, C&H Farms may seek reimbursement from the claimant's committee representative from the claimant's committee representative and one half of the 3rd representive committee.

If a claimant within the indicated area of impact indicates that they are out of water, C&H Farms will accept the responsibility of providing water for human consumptive needs within seventy-two (72) hours and to cover the claim review period. C&H Farms reserves the right to recover cost of such emergency supply if the claim is denied by C&H Farms or found to be fraudulent or frivolous, If C&H Farms denies a claim and the claimant elects to proceed within three (3) member committee, C&H Farms will continue the emergency water supply at the claimants request during the committee deliberations, but reserves the right to recover the total cost of emergency water supply in the case that the committee upholds the denial of the claim. Similarly C&H Farms reserves the right to recover costs associated with the claim is found to be fraudulent or frivolous.

If this is determined by the committee or shown to be satisfaction that a well operating Under a mitigation plan similar to C&H Farms Plan other than those owned and operated by C&H Farms share of the costs associated with mitigation will be allocated in proportion to its share of the impact. Such a determination shall be made by the committee after notification of the third party well owner, giving the third party well owner opportunity to participate in the proceeding of the committee.

PLAN ADMINISTRATION

Nothing in this Plan shall be construed to prevent the Department of Enviromental Quality Staff from providing information needed for resolution of claims by the Committee.