

considered: _____

WATER PERMIT NO. 5147-3

MAP No. same

Name of Applicant National Food Corporation

Post Office Address P.O. Box 33845, Seattle, WA 98133

Amount of Water Claimed 0.22 cfs Total Acres NA

Source of Water Supply 2 wells Codell and/or Dakota Sandstone

Water to be used for commercial purposes County Aurora

About 2 1/2 miles E of Plankinton

PROOF OF PUBLICATION: Received _____ Not Received _____

APPLICATION: Approved _____ Subject to _____

F.F. & C.L. Adopted _____ Not Approved _____ Deferred _____

PRIORITY _____ Date Received August 4, 1987 Fee \$225.00 Remarks project is for egg laying hen houses & future egg processing facility

Corrected Application Received _____ Period of Annual Use Jan 1 - Dec 31

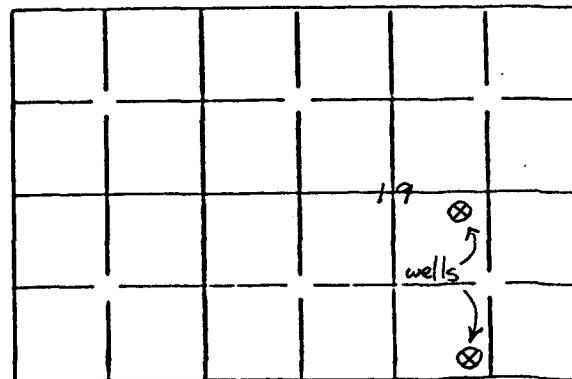
WATER QUALITY APPROVAL RECEIVED _____ APPROVED/CONDITIONAL (Circle one)

WI-1 Description same as Application YES _____ NO _____ REMARKS _____

Diversion Point 2 wells: W 1/2 SE 1/4 section 19 -

T103N-R63W

Land to be Irrigated NA



Well Log: Driller wells not constructed Licensed YES _____ NO _____

Depth of Well _____ REMARKS _____

Type of Map plat & topo PREPARED BY Brian V. Bookey Reviewed and the Number assigned on August 4, 1987 By Ron Duval

Mail to: Water Rights Div.
DWNRR, Foss Bldg.
Pierre, SD 57501
(605) 773-3352

No. 5147-3 Hydrologic Unit 10160011
Map No. same Basin James River
Newspaper South Dakota Mail, Box 367, Plankinton (Thur)

Application For Permit To Appropriate Water Within The State Of South Dakota

Check use of water: Industrial ☐ Commercial ☒ Municipal ☐ Other Common Distribution System ☐
Rural Water System ☐ Suburban Housing ☐ Geothermal Heat ☐ Institutional ☐ Recreational ☐
Domestic ☐ (above 18gpm) Other ☐

Type of Application: Check one or more of the following

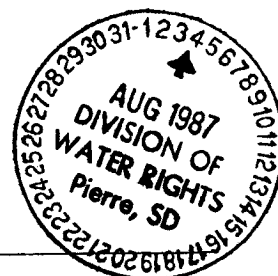
New ☒ Vested Right ☐ Future Use ☐ Change Use ☐

☐ Amend Permit No. _____ with old priority date retained

Change diversion point(s) ☐ Add diversion point(s) ☐ Other ☐

☐ Application to: Change diversion point(s) ☐ Add diversion point(s) ☐ on Permit No. _____

☐ Construction to use water reserved by Future Use Permit No. _____



- Name of Applicant National Food Corporation Phone No. (206) 546-6533
Post Office Address P.O. Box 33445 Seattle State WA. 98133
(Street, RR or Box) 0.22 (City) Zip Code
- Amount of water claimed (c.f.s.) 2.2 CFS or 100 gal. per min.
- Source of water supply groundwater; Codell (300ft.) or Dakota Sandstone (600ft.)
- Location of point of diversion Two points of diversion: each in the SE 1/4 of Section 19, Twnshp 103N, Range 6X, 3W. of the 15th P.M. One well in approx. the NW 1/4 of the SE 1/4 and the other in approx. the SW 1/4 of the SE 1/4 of the Section.
County Aurora
- Counties where water will be used Aurora
- Annual period during which water is to be used All year. January 1 - December 31
- Give a brief description of proposed project. When available include any preliminary engineering report or other reports or information that will help explain the project. (Attach sheet if more space is needed)

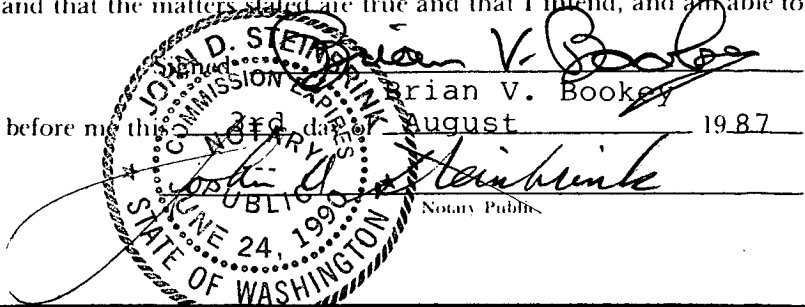
SEE ATTACHMENT

Attachments: Attach Form 2A if diversion from a well or dugout, or if storage of water, is proposed. Attach map (see instruction)

STATE OF ~~WASHINGTON~~ WASHINGTON
County of King)^{ss}

I, Brian V. Bookey, Secretary of National Food Corp the applicant, certify that I have read this application, have examined the attached map and that the matters stated are true and that I intend, and am able to complete the necessary construction.

Subscribed and sworn to before me this 2nd day of August 1987



ATTACHMENT TO APPLICATION FOR PERMIT
TO APPROPRIATE WATER WITHIN THE STATE OF SOUTH DAKOTA
NATIONAL FOOD CORPORATION

7. Description of proposed project: The proposed project involves the construction of egg laying hen houses in the initial phases and an egg processing facility in the future. Two production wells of 50 g.p.m. each are planned. The primary use of the water will be for consumption by the birds, with average usage reaching a maximum of approximately 67,000 gallons per day when the project is fully phased in. The manure will be removed from the buildings in a solid form and utilized on nearby lands as agricultural fertilizer. Limited storage of solid manure may occur either on or off the company property when weather or crops limit access to land for spreading.

Guam V. Bode

Supplemental Information

(type or print in ink)

1. Well Information - Proposed construction **TWO POINTS OF DIVERSION**
Same construction expected for each:

- a) Drill Hole Diameter _____ Depth _____
- b) Casing Type Metal Diameter 8" Thickness _____
- c) Screen Type _____ Diameter _____ Thickness _____
- d) Gravel Pack Thickness _____ Length of Gravel Pack _____
- e) Depth to Top of Water Bearing Material _____
- f) Depth to Water (ground surface to water level) _____
- g) Distance to nearest existing domestic well:
- On applicants property _____ On property owned by others _____

2. Dugout Information Estimates **N/A**

- a) Surface Dimensions _____ Depth _____
- b) Depth to water (ground surface to water level) _____

3. Water Storage Dams **N/A**

If the proposed water use system contains one or more storage dams, please furnish the information requested below. The locations of each dam should be shown on the map submitted with the application.

- a) If a private engineering firm or government agency was involved in the design of this dam please give their name and address

b) Freeboard _____

c) Crest Width _____

Crest Length _____

d) Height _____

e) Primary Outlet Capacity _____
If Pipe, diameter _____

f) Secondary Spillway Capacity _____
Spillway width _____

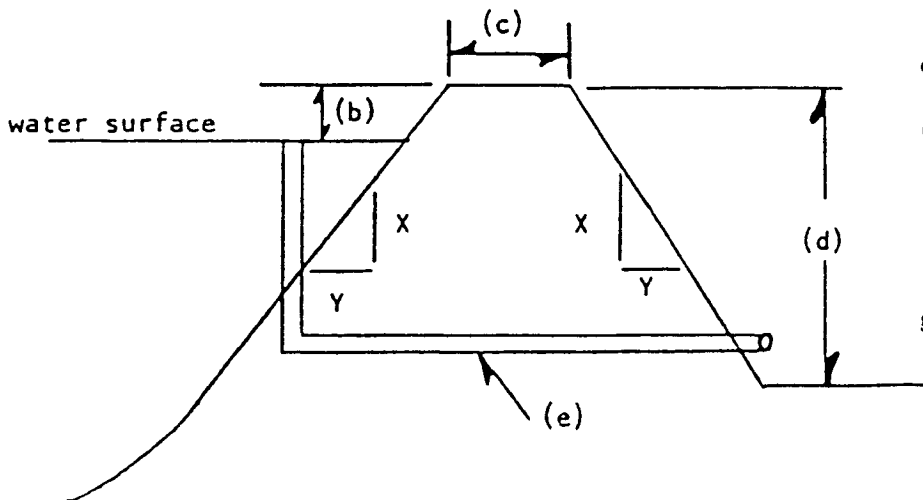
g) X & Y Slope
Upstream _____

Downstream _____

Surface Area of Impoundment _____

Storage _____ acre feet

Drainage area above dam _____



Brian V. Bookey
Signature of Applicant Brian V. Bookey

WATER PERMIT

The Water Management Board hereby approves Water Permit Application No. 5147-3
National Food Corporation P.O. Box 33745
(Applicant) (Street, RR or Box)
Seattle Washington 98133 With the following qualifications.
(City) (State) (Zip Code)

See attached sheet

Date of first receipt of application August 4, 1987.

Date of return to applicant for correction, amendments or changes required _____, 19____.

Date of receipt of corrected application _____, 19____. Approved September 9, 1987.

The Water Management Board approved this Water Permit No. 3147-3 authorizing the construction of the water use system and the placing of water to beneficial use as stated in the Application and as qualified in the Water Permit approval, subject, however, to the following limitations and conditions:

1. The date from which applicant may claim right is August 4, 1987.
2. The equivalent of at least one-fifth of the specified work is to be completed on or before March 9, 1990.
3. The whole of said work is to be completed on or before September 9, 1992.
4. The limit of time for proof of beneficial use of water appropriated in accordance herewith is September 9, 1996.
5. The water appropriated shall be used for the purpose of commercial use to supply a hen-house egg laying and egg processing facility.
6. The prior right of all persons who, by compliance with the laws of the State of South Dakota, have acquired a right to the use of water must not be unlawfully impaired by this appropriation.
7. The amount of the appropriation granted shall not exceed 0.22 cubic feet per second; neither shall it exceed the amount of water needed for the beneficial uses served and to which water is actually and beneficially applied for commercial use on or before September 9, 1996. The water is to be used during the following described annual period: January 1 - December 31

WATER MANAGEMENT BOARD

By: John Hatch
Chief Engineer JOHN HATCH
Division of Water Rights
Dept. of Water and Natural Resources
NOV 3 1987
_____, 19____

QUALIFICATIONS FOR PERMIT NO. 5147-3

1. That in approving Permit No. 5147-3 the Water Management Board understands that the project is for construction of egg laying hen houses for 1,000,000 hens with construction of an egg processing facility sometime in the future. Manure will be removed from the hen houses in a solid form at least once every two weeks and disposed of by land application to nearby lands either on company property or under contract with local farmers. Longer term storage of solid manure within bermed storage areas may occur either on or off of company property when weather or crops limit access to the land for spreading. The potential for construction of a processing plant in the future will require that the applicant contact DWNR for regulations and guidelines for the disposal of any process generated wastes.
2. The casings of the wells to be constructed under Permit No. 5147-3 shall be pressure grouted with cement (bottom to top) from the producing formation to the surface and the wells constructed in compliance with Water Management Well Construction Rules, Chapter 74:02:04.
3. If Dakota Formation wells are drilled, the wells shall be valved and the flow reduced to the amount needed or to a minimum when not being used.
4. This permit does not authorize screening both the Codell and Dakota Formations in the same well. Separate wells must be constructed for each formation utilized.
5. The wells approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
6. Approval of this permit is subject to:
 - a. Submission of a proposed manure and liquid waste, and sanitary sewer disposal management plan prior to operation of the egg laying hen house project and prior to operation of the proposed egg processing for review and approval to the Division of Environmental Quality. The management plan must include as applicable;
 - 1) Months when manure and any liquid waste disposal will occur and application rates;
 - 2) Proposal for disposal of manure and liquid wastes in a manner that will allow adequate crop uptake to prevent nitrate leaching into any groundwater;

3) Information on the anticipated crops to be grown on the disposal land;

4) Actions to be taken to correct or minimize any adverse impact to receiving waters or to the environment that may result from unauthorized disposal of manure or liquid wastes;

5) A proposed monitoring plan including ambient water quality monitoring and monitoring of the groundwater expected to be impacted by the operation, and monitoring to ensure that surface water quality is not degraded;

6) A proposed compliance sampling plan which includes adequate provisions for sampling monitoring wells and/or appropriate nearby water wells, and the parameters to be sampled for; and

7) A contingency plan for bringing the manure and liquid waste disposal into compliance, if permitted allowable limits for groundwater may be exceeded.

b. Submission of plans and specifications prior to construction for both the egg laying hen house construction project and the egg processing facility for review and approval of the water supply; manure collection, storage and disposal; and liquid waste storage and disposal to the Division of Environmental Quality. The plans and specifications shall include as applicable:

1) Proposed well construction, piping details, and any supporting hydraulic calculations, hen house manure collection and storage, manure storage sites and liquid waste collection and storage;

2) The location of the manure storage sites and any liquid waste storage facilities within the watershed in relation to any stream channels or the 100 year floodplain;

3) The location of any residences, commercial or business developments, and wells within one-half mile of the proposed manure storage site, and liquid waste storage facilities and information regarding the construction of and static water levels in the wells.

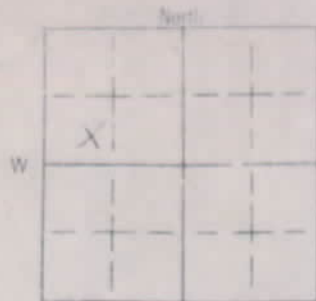
4) The names, addresses and telephone numbers of the owner, operator and contact person for the proposed egg production unit.

- 5) A description of the geology, hydrology, (including project area of influence) and agricultural practices within a one mile radius of the manure storage and disposal sites and liquid waste storage and disposal; including topography, soils types, and aquifers.
 - 6) A description of the type, source, and chemical, physical, radiological, and toxic characteristics of the manure and liquid waste, the quantities to be disposed of, and the expected concentrations of the above contaminants; and
 - 7) A description of the groundwaters most likely to be affected by the disposal of any manure or liquid waste including water quality information for any receiving groundwater, a description of the groundwater aquifers, the depths to the groundwater, the saturated thickness, flow directions, porosities, hydraulic conductivities, flow system characteristics, and any well logs that are available.
7. Disposal of the manure and liquid wastes shall be in a manner that prevents runoff from the manure and liquid wastes disposal sites from entering the waters of the State. The diffused drainage of natural precipitation on agricultural land resulting from a "non-point source" is not subject to these conditions.
 8. Backflow preventors shall be installed on the water supply piping to prevent cross connections between the wells or domestic water and hen watering or clean up equipment.
 9. Design, construction and management of the manure storage areas shall be sufficient to maintain a seepage rate of less than 10^{-7} centimeters per second.
 10. A copy of any records required to be kept pursuant to this permit shall be provided to the Division of Environmental Quality when requested.

correct legal
Location NW SE 19 Twp 103N R 63W

County
Aurora

Please mark well
location with
an 'X'



Well Completion Date 10-7-88

PROPOSED USE

☐ Domestic ☐ Municipal ☐ Test Holes
☒ Irrigation ☒ Industrial ☐ Stock

Method of Drilling

reverse

CASING DATA

☐ Steel ☒ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT 8	IN 8	FT 0	FT 80	IN 14
LB/FT 8	IN 8	FT 80	FT 220	IN 14
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUT:

Was the well grouted? ☒ YES ☐ NO

To what depth? 210 FEET

What is grouting material? cement

If cement, number of sacks? 140

Describe grouting procedure line

What was grout weight? LB/GAL

SCREEN: ☐ Perforated pipe ☒ Manufactured

Diameter 8 IN Length 34 FEET

Material

Slot Size .016 Set From 220 Feet To Feet

Slot Size Set From Feet To Feet

Slot Size Set From Feet To Feet

Other information

Was a packer or seal used? ☐ YES ☒ NO

If so, what material?

Describe packer(s) and location?

Was well disinfected upon completion? ☒ YES ☐ NO

Explain

Sanitary analysis ☐ YES ☒ NO

Well Owner

Name National Foods

Address Box 34745 Smith Lake 98133

Well Log

Depth

Formation

From

To

yellow clay

0

30

blue clay

30

80

blue clay w/ sand streaks

80

100

blue clay w/ sand streaks

100

107

chalk

107

200

chalk w/ good coal w/ hard spots

200

220

good coal

220

253

shale

253

255

STATIC WATER LEVEL 108 Feet

If flowing, closed in pressure PSI

GPM flow through inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other

Other, specify

Will well be completely shut in?

WELL TEST DATA:

☒ Pumped

☐ Bailed

☐ Other

Describe

Pumping Level Below Land Surface

ft. After Hrs pumped GPM

ft. After Hrs pumped GPM

ft. After Hrs pumped GPM

REMARKS

This well was drilled under license # 440

And this report is true and accurate

Drilling firm Pullman Well Drilling

Signature of License Representative

Ralph Pullman

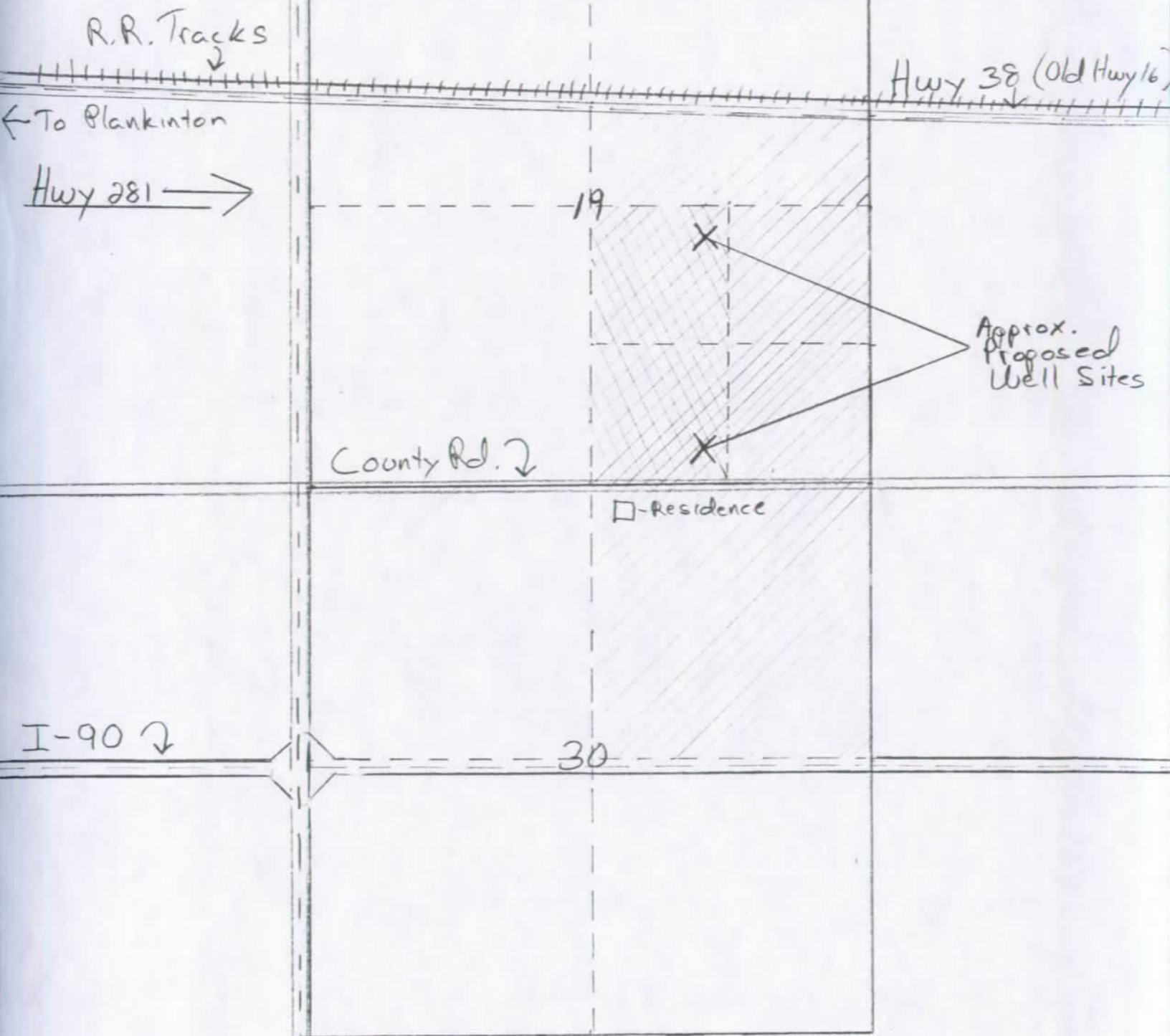
Signature of Well Owner

Date

2-11-89

Attachment to Application of
National Food Corp. for Permit
to Appropriate Water

N ↑



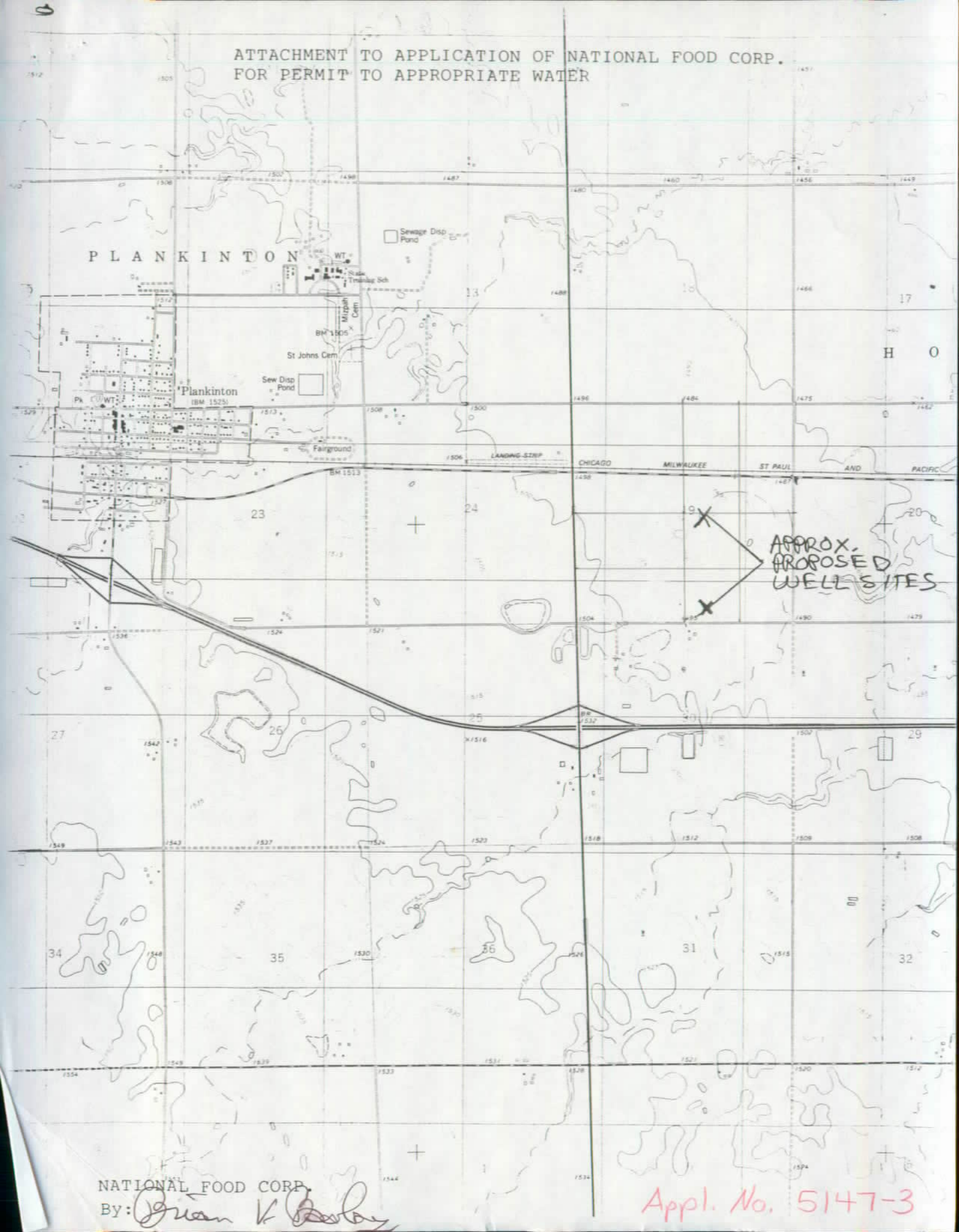
NATIONAL FOOD CORP.

By: Brian V. Bookery
Brian V. Bookery

Sections 19 + 30, ^{by for small}
Twnsh 103, Range 6 ~~X~~ 3
W. of 5th P.M. Aurora
County, South Dakota

≡ = Applicant's Land
≡ = Approx. Proposed Building Sites
Appl. No. 5147-3

ATTACHMENT TO APPLICATION OF NATIONAL FOOD CORP.
FOR PERMIT TO APPROPRIATE WATER



NATIONAL FOOD CORP.

BY:

[Handwritten signature]

Appl. No. 5147-3

RECEIPT

Division of Water Rights

South Dakota Department of Water and Natural Resources

410955

Pierre, August 4, 1987

RECEIVED OF National Food Corporation, P.O. Box 33745, Seattle, WA 98133

the following amount in fees for services rendered as provided for by law:

Fee for Application for Permit No. <u>5147-3</u> to Appropriate Water, to construct works and to put water to beneficial use _____	225	00
Fee for Application for Permit No. _____ to Appropriate Water for Future Use _____		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____		
Fee for Filing Transfer Form _____		
Fee for Filing Extension Request _____		
Fee for Certified Copy of _____		
Fee for Print Copy of Map _____		
Fee for Certifying _____		
Fee for _____		
(Any Other Work Provided by Law)	Total	225 00

By John Hatch
Chief Engineer

JOHN HATCH

(MS)

phones 206-546-6533 and 523-4900

National Food Corporation

SHELL EGGS FROZEN EGGS EGG SOLIDS

August 3, 1987

P. O. Box 33745

16740 Aurora Avenue North

Seattle, Washington 98133

Mr. Jim Goodman
Department of Water & Natural Resources
Foss Bldg.
Pierre, South Dakota 57501

Re: Well Permit

Dear Mr. Goodman:

In keeping with our telephone conversation of today, please find enclosed duplicate originals of our Application for Permit to Appropriate Water Within the State of South Dakota together with our check for \$225.00 to cover the filing fee.

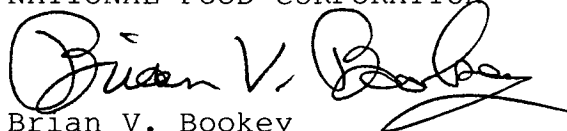
Per our conversation, I have left a good deal of the information on question 1 of the Supplemental Information form 2A blank with the understanding that you can accept it this way. In all respects, we expect to construct the wells in accordance with all state and local standards and that items such as screening will be dependent upon the subsurface geology found during drilling.

You will note also that there are two maps attached; one hand drawn by me and the other a topographical map. Between the two, I believe an adequate description of the site is provided. These are not signed by an engineer, but it is my understanding that your office can provide the verification necessary to accept the application.

Please contact me if you have any questions or if you need any additional information.

We are very appreciative of your prompt handling of this matter which should enable us to proceed without any delays.

Sincerely yours,
NATIONAL FOOD CORPORATION



Brian V. Bookey
Secretary-Treasurer

RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 5147-3

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Division, Department of Water and Natural Resources concerning Water Permit Application No. 5147-3, National Food Corp., PO Box 33845, Seattle WA.

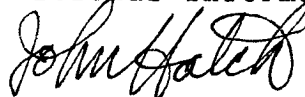
The Chief Engineer is recommending APPROVAL of Application No. 5147-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) in the public interest with the following qualifications:

1. That in approving Permit No. 5147-3 the Water Management Board understands that the project is for construction of egg laying hen houses for 1,000,000 hens with construction of an egg processing facility sometime in the future. Manure will be removed from the hen houses in a solid form at least once every two weeks and disposed of by land application to nearby lands either on company property or under contract with local farmers. Longer term storage of solid manure within bermed storage areas may occur either on or off of company property when weather or crops limit access to the land for spreading. Liquid waste from the egg processing facility will be stored in water tight tanks with final disposal by land application using liquid spreading equipment ("honey wagons").
2. The casings of the wells to be constructed under Permit No. 5147-3 shall be pressure grouted with cement (bottom to top) from the producing formation to the surface and the wells constructed in compliance with Water Management Well Construction Rules, Chapter 74:02:04.
3. If Dakota Formation wells are drilled, the wells shall be valved and the flow reduced to the amount needed or to a minimum when not being used.
4. This permit does not authorize screening both the Codell and Dakota Formations in the same well. Separate wells must be constructed for each formation utilized.
5. The wells approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
6. Approval of this permit is subject to:

- a. Submission of a proposed manure and liquid waste, and sanitary sewer disposal management plan prior to operation of the egg laying hen house project and prior to operation of the proposed egg processing for review and approval to the Division of Environmental Quality. The management plan must include as applicable;
 - 1) Months when manure and any liquid waste disposal will occur and application rates;
 - 2) Proposal for disposal of manure and liquid wastes in a manner that will allow adequate crop uptake to prevent nitrate leaching into any groundwater;
 - 3) Information on the anticipated crops to be grown on the disposal land;
 - 4) Actions to be taken to correct or minimize any adverse impact to receiving waters or to the environment that may result from unauthorized disposal of manure or liquid wastes;
 - 5) A proposed monitoring plan including ambient water quality monitoring and monitoring of the groundwater expected to be impacted by the operation, and monitoring to ensure that surface water quality is not degraded;
 - 6) A proposed compliance sampling plan which includes adequate provisions for sampling monitoring wells and/or appropriate nearby water wells, and the parameters to be sampled for; and
 - 7) A contingency plan for bringing the manure and liquid waste disposal into compliance, if permitted allowable limits for groundwater may be exceeded.
- b. Submission of plans and specifications prior to construction for both the egg laying hen house construction project and the egg processing facility for review and approval of the water supply; manure collection, storage and disposal; and liquid waste storage and disposal to the Division of Environmental Quality. The plans and specifications shall include as applicable:
 - 1) Proposed well construction, piping details, and any supporting hydraulic calculations, hen house manure collection and storage, manure storage sites and liquid waste collection and storage;
 - 2) The location of the manure storage sites and any liquid waste storage facilities within the watershed in relation to any stream channels or the 100 year floodplain;
 - 3) The location of any residences: commercial or business developments, and wells within one-half mile of the proposed manure storage site, and liquid waste storage facilities and information regarding the construction of and static water levels in the wells.

- 4) The names, addresses and telephone numbers of the owner, operator and contact person for the proposed egg production unit.
 - 5) A description of the geology, hydrology, (including project area of influence) and agricultural practices within a one mile radius of the manure storage and disposal sites and liquid waste storage and disposal; including topography, soils types, and aquifers.
 - 6) A description of the type, source, and chemical, physical, radiological, and toxic characteristics of the manure and liquid waste, the quantities to be disposed of, and the expected concentrations of the above contaminants; and
 - 7) A description of the groundwaters most likely to be affected by the disposal of any manure or liquid waste including water quality information for any receiving groundwater, a description of the groundwater aquifers, the depths to the groundwater, the saturated thickness, flow directions, porosities, hydraulic conductivities, flow system characteristics, and any well logs that are available.
7. Disposal of the manure and liquid wastes shall be in a manner that prevents runoff from the manure and liquid wastes disposal sites from entering the waters of the State. The diffused drainage of natural precipitation on agricultural land resulting from a "non-point source" is not subject to these conditions.
 8. Backflow preventors shall be installed on the water supply piping to prevent cross connections between the wells or domestic water and hen watering or clean up equipment.
 9. Design, construction and management of the manure storage areas shall be sufficient to maintain a seepage rate of less than 10^{-7} centimeters per second.
 10. A copy of any records required to be kept pursuant to this permit shall be provided to the Division of Environmental Quality when requested.
 11. That contracts with local landowners for storage and disposal of manure and liquid wastes include applicable qualifications to Permit No. 5147-3. That copies of the contracts and the names, addresses and telephone numbers of the local landowners who will be storing and disposing of the manure and liquid wastes be provided to the Division of Environmental Quality.

See the attached report for additional information.



JOHN HATCH, Chief Engineer
August 6, 1987

REPORT ON APPLICATION NO. 5147-3
NATIONAL FOOD CORP.
August 4, 1987

This application proposes to appropriate 0.22 cfs from 2 wells either approximately 300 feet deep into the Codell sandstone or 670 feet deep into the Dakota Formation. The wells will be located in the W 1/2 SE 1/4 of Section 19, T103N, R63W in Aurora County. The water is to supply a commercial egg-laying facility and egg processing facility owned by National Food Corporation and will be located in the S 1/2 NE 1/4, SE 1/4 of Section 19; NE 1/4 Section 30; all in T103N, R63W, Aurora County.

Aquifer - Codell or Dakota Formation

The Codell Aquifer (locally called sandrock) is composed of up to 136 feet of gray, brown, reddish brown, green or black cemented, fine to medium grained sandstone, siltstone and much soft, fine to medium sand and silty shale (Hamilton, 1985). According to Hamilton's report (maps included in this report), the Codell should be greater than 50 feet in thickness with a formation top approximately 250 feet below land surface. Hamilton estimated an average transmissivity of 700 ft²/day which would translate to a maximum potential yield of about 180 gpm for a properly constructed well. The Codell underlies approximately 707 square miles of Aurora County and contains an estimated 905,000 acre feet of recoverable water (Hedges, etal, 1982). Hamilton estimated in his report that the Codell underlies 900 square miles contains 6 million acre feet of water in storage in Aurora County. The Hedges report considers recoverable water from the aquifer whereas Hamilton considered total water in storage, hence the different amounts. Hamilton also estimated recharge at 1700 acre feet per year.

The Codell is confined and contains water under artesian conditions. A static water level of about 115-120 feet below land surface can be expected. An observation well, AU-77D, (Observation Well Files, 1987) is located about 3 miles North of this application. The Division of Water Rights has been measuring this well since 1977. The well does not reflect pumping for municipal and institutional use to the west nor has the water level shown much change. There has been a 2 feet rise in water levels since 1985 possibly indicating recharge due to the wet year of 1986.

The Dakota Formation is composed of interbedded tan, gray, and white siltstone, sandstone and shale (Hamilton, 1985). According to Hamilton (maps included with this report), the Dakota should be greater than 80 feet in thickness with a formation top approximately 590 feet below land surface. Hamilton estimates an average transmissivity value of 4000 ft²/day for the Dakota. This would translate to a potential well yield of about 220 gpm for a properly constructed well. The Dakota underlies 719 square

miles of Aurora County and contains over 10 million acre feet of recoverable water (Hedges, et al., 1982). Hamilton estimates the Dakota underlies 1230 square miles and contains 40 million acre feet of water in storage. The Hedges report considers recoverable water rather than total water in storage. Hamilton estimated recharge to the Dakota to be 31,000 acre feet per year.

The Dakota is confined and contains water under artesian conditions. The Dakota will flow at the land surface and should have a shut in pressure of approximately 10 psi. The well would have to be pumped to yield 220 gpm. Water levels in the Dakota Formation are reported to have declined from 12-27 feet since 1960 in Aurora County. This is due primarily to allowing wells to flow uncontrolled. The rates of decline are slowing primarily because the rate of discharge diminishes as the water level declines. The Division of Water Rights does not maintain or monitor any Dakota observation wells in Aurora County. Water Quality may be important to the user. Included with this report are some representative water analyses for both the Codell and Dakota Formation taken from Hamilton's report.

There is a chance water could be obtained from a glacial source or the Niobrara chalk in this area, however, this does not appear likely. Some Niobrara wells are excellent producers but in this area it is a unknown factor.

Review of Existing Water Permits

The City of Plankinton (permit No. 4120-3) has 3 Codell wells with a total diversion of 0.36 cfs. The State Training School (Permit No. 551-3) has one Codell well with a diversion rate of 0.17 cfs. These wells are located about 2 1/2 miles northwest of the proposed application. A production test on a Plankinton city well (1978) (Water Rights Division Files, 1987) indicated the well produced 51 gpm with 73 feet of drawdown. None of these diversion cause a significant fluctuation in observation well AU-77D which is 3 miles to the northeast.

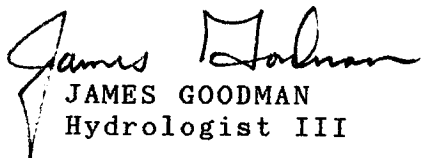
There are no permits issued for water out of the Dakota Formation in this area.

The Codell, Niobrara and Dakota Formation are used for domestic water supplies in this area. There should be no adverse impacts.

Conclusions

1. Water is available from either the Codell or Dakota Formation.
2. Test hole drilling and well production testing will be necessary to determine on site well yields.
3. Interference should not be a problem. Similar diversions rates at Plankinton and the State Training School are not significant at observation well AU-77D. Codell wells at this site would have similar effects. These effects can be quantified when wells are installed and tested. Interference in the Dakota is not a concern.

4. Water levels in the Codell do not exhibit any trend basically illustrating insignificant water use. Water levels in the Dakota Formation are declining. This is due primarily because of the large number of uncontrolled flowing wells. Also water level records are suspect because domestic wells have been measured. These are wells which are in use. Observation wells constructed by the Division of Water Rights in other parts of the state do not show those rates of decline. Because of the very large quantity of water in storage in the Dakota Formation, there is no technical reason not to use water from that Formation simply to protect a few feet of artesian head pressure.


JAMES GOODMAN
Hydrologist III

Bibliography

Hamilton, L.J., 1985, Water Resources of Aurora and Jerauld Counties, South Dakota, Water Resources Investigations Report 84-4030, USGS, Huron SD.

Hedges, L.S., S. L. Burch, D. L. Iles, R. A. Barari, R. A. Schoon, 1982, Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa, For US Army Corps of Engineers, DWNR, SDGS, Vermillion SD 57069.

Observation Well Files, 1987, Observation Well AU-77D, DWNR, Division of Water Rights, Joe Foss Building, Pierre SD 57501.

Water Rights Division Files, 1987, Permit and Domestic Well Files for Aurora County, DWNR, Division of Water Rights, Joe Foss Building, Pierre SD 57501.

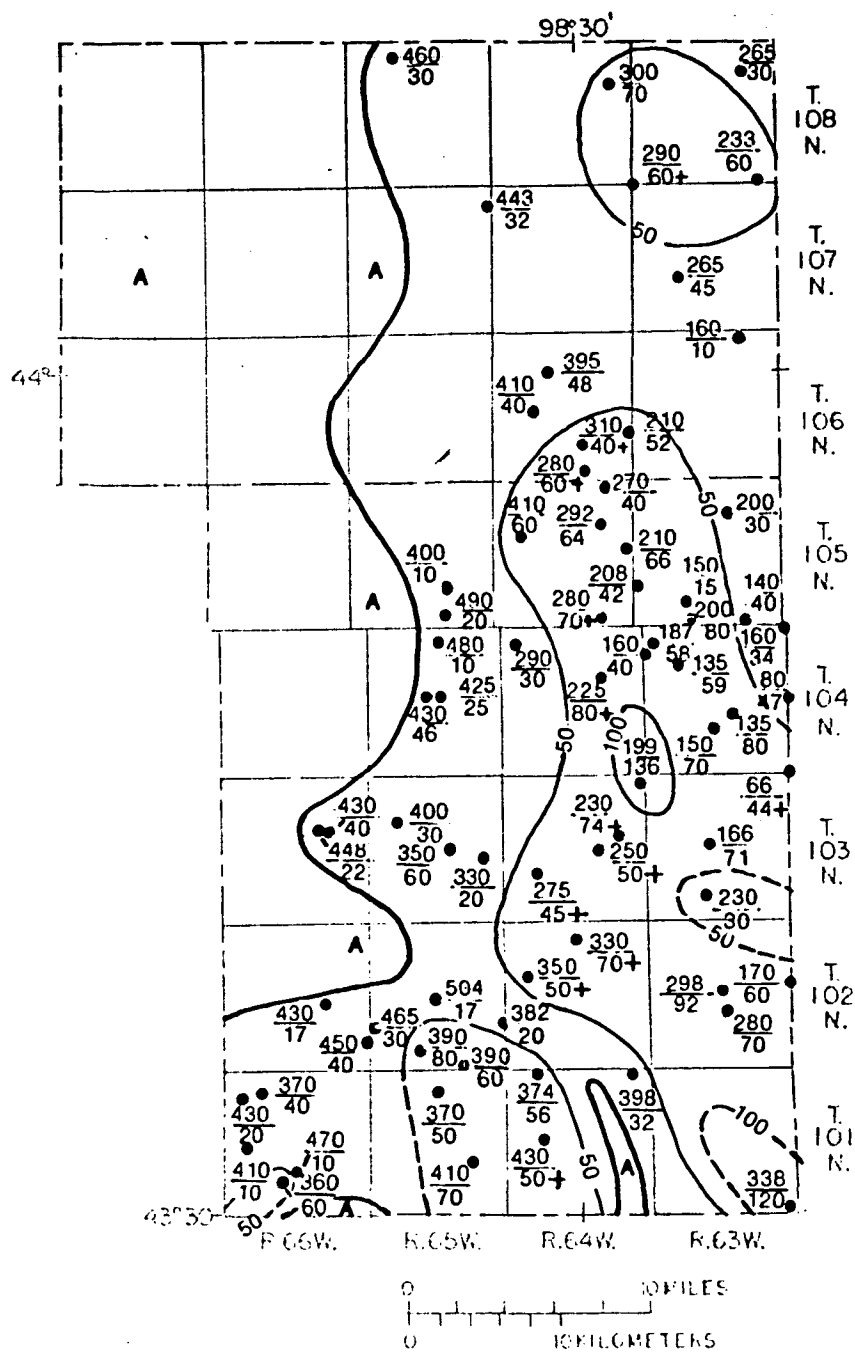
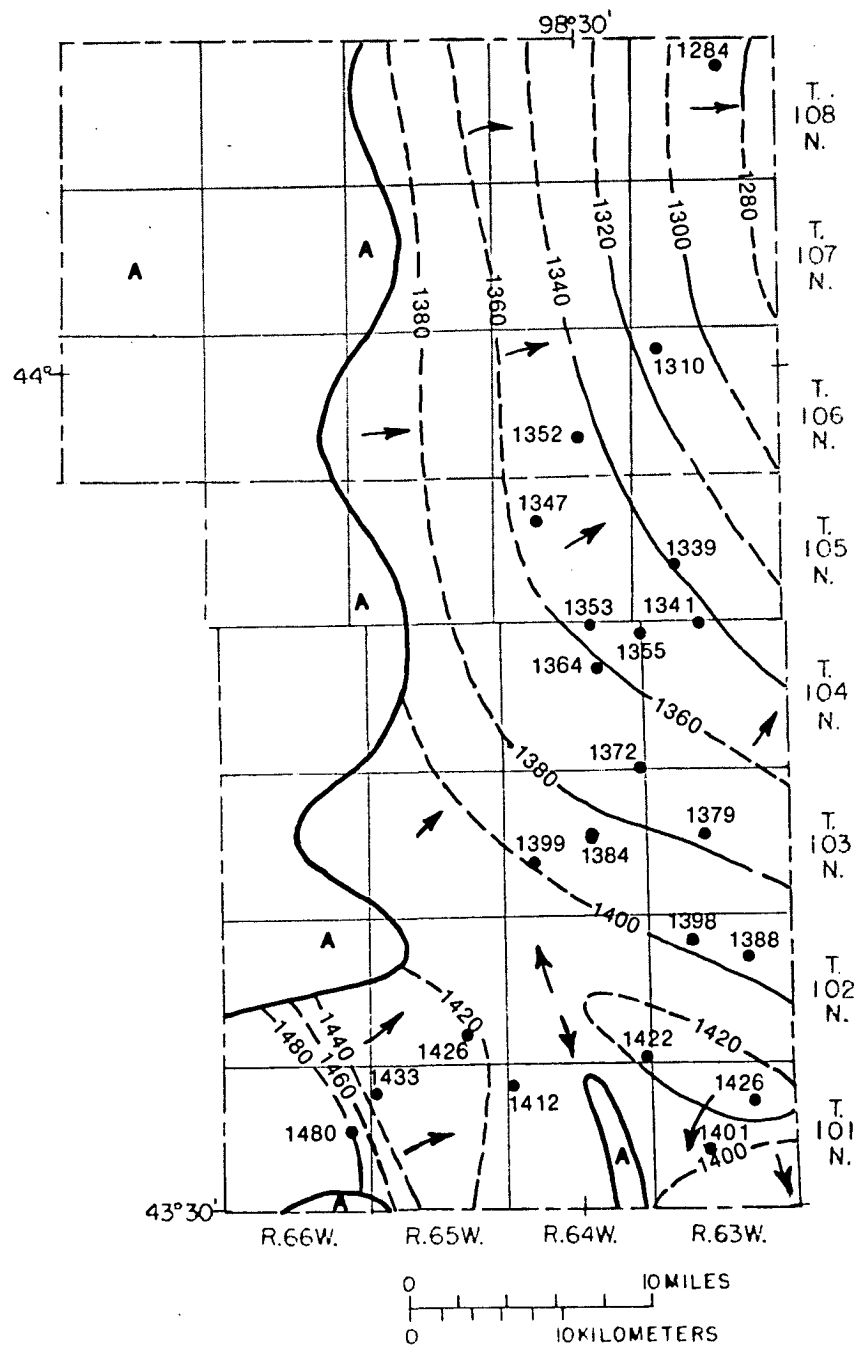


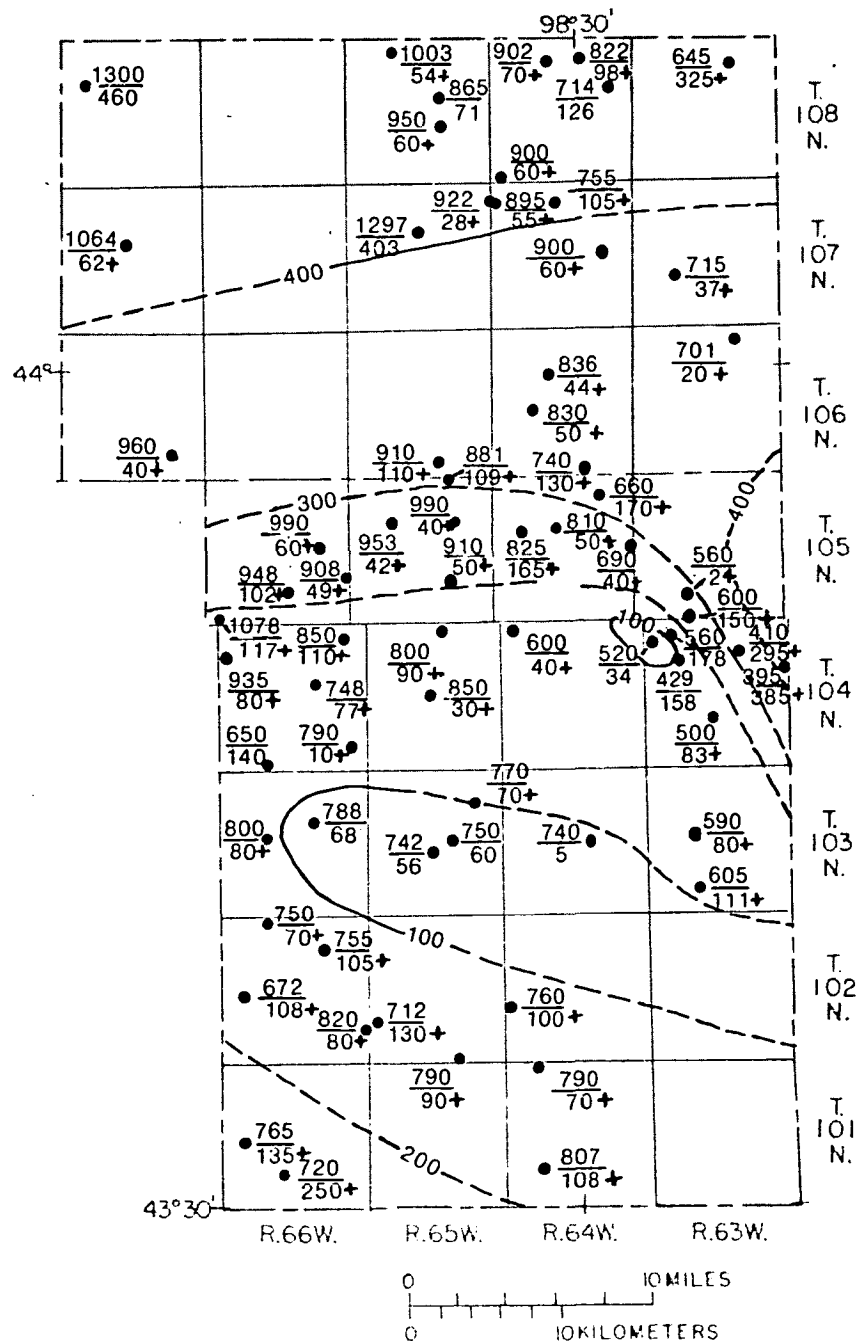
Figure 15.--Extent, depth, and thickness of the Codell aquifer.



EXPLANATION

- A** AQUIFER ABSENT
- 1400— POTENTIOMETRIC CONTOUR--Shows altitude of the potentiometric surface in 1977-79. Dashed where approximately located. Interval 20 feet. Datum is sea level.
- 1384 WELL IN THE CODELL AQUIFER--Number is altitude of water level, in feet. Datum is sea level.
- GENERAL DIRECTION OF GROUND-WATER MOVEMENT

Figure 16.--Potentiometric contours of the Codell aquifer.



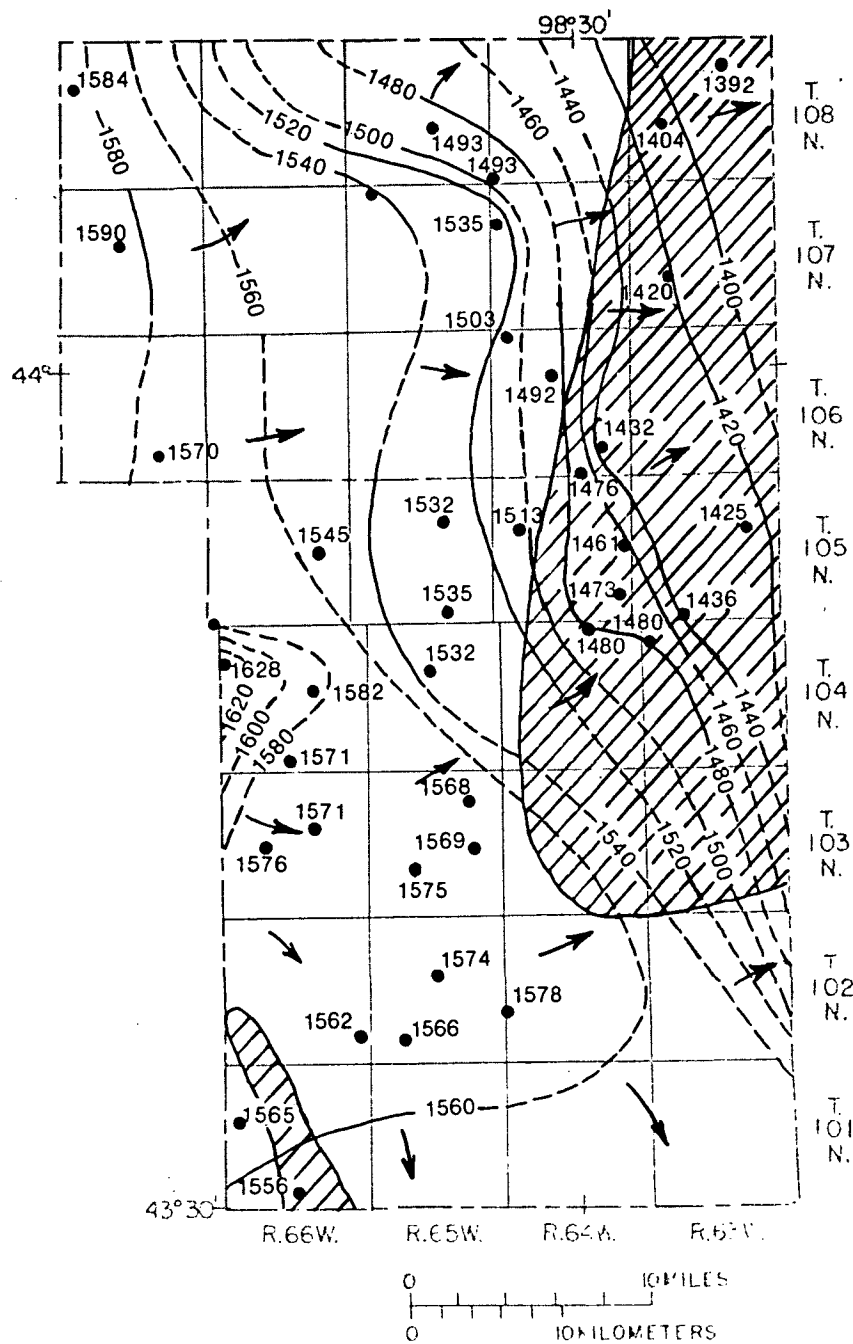
EXPLANATION

— 400 --- LINE OF EQUAL THICKNESS OF AQUIFER--Dashed where approximately located. Interval 100 feet.

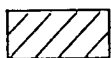
850 • WELL OR TEST HOLE--Upper number is depth to top of aquifer, in feet; lower number is aquifer thickness, in feet. A plus signifies thickness may be greater than shown.

Figure 17.--Extent, depth, and thickness of the Dakota aquifer.

HAMILTON, 1985



EXPLANATION



AREA OF FLOWING WELLS

— 1500 — POTENTIOMETRIC CONTOUR—Shows altitude of the potentiometric surface in 1976-78. Dashed where approximately located. Interval 20 feet. Datum is sea level.

1568. WELL IN THE DAKOTA AQUIFER--Number is altitude of water level, in feet. Datum is sea level.

→ GENERAL DIRECTION OF GROUND-WATER MOVEMENT

Figure 18.--Potentiometric contours of the Dakota aquifer.

Table 9.—Selected chemical analyses of water. Analyses by U.S. Geological Survey Laboratory unless otherwise noted—Continued

Reported in milligrams per liter (mg/L) except as indicated. One milligram per liter is approximately equal to one part per million. One microgram per liter (µg/L) is approximately equal to one part per billion.																						
Sample number	Location	Date	Silica (SiO ₂)	Iron (Fe) (µg/L)	Manganese (Mn) (µg/L)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate plus nitrite (dissolved as N)	Orthophosphorus (dissolved as P)	Boron (B) (µg/L)	Dissolved solids		Total hardness (Ca, Mg)	Sodium-adsorption ratio (SAR)	Specific conductance (micromhos per centimeter at 25°C)	pH (units)
																	Residue at 180°C	Calculated				
GLACIAL AQUIFERS																						
Crow Creek aquifer																						
15	108N67W20ADDD	8-30-79	34	150	400	270	66	47	18	560	620	9.0	0.4	0.22	0.03	210	--	1,340	930	0.7	1,750	6.8
16	107N67W17DDBD	8-8-78	23	80	650	140	42	47	9.4	420	260	15	.3	.06	--	180	--	745	520	.9	1,120	7.7
17	107N67W33DADB	8-8-78	26	70	1,400	130	36	50	10	420	220	15	.2	.02	--	200	--	696	470	1.0	1,000	7.3
18	106N67W11BBAA	9-4-79	30	680	1,200	91	22	190	16	410	390	17	.4	.00	.03	730	--	961	320	4.6	1,900	7.2
19	107N65W29BCBA	8-27-79	33	4,200	1,000	170	43	53	16	550	290	4.1	.2	.01	.01	360	--	886	600	.9	1,600	6.7
20	107N66W34DADA	9-4-79	29	390	1,400	92	25	63	11	310	230	6.2	.3	.01	.03	310	--	436	240	1.8	1,150	7.2
21	106N66W22BDDA	9-4-79	27	490	1,800	200	55	150	13	410	720	13	.2	.01	.01	630	--	1,380	730	2.4	1,800	7.1
Warren aquifer																						
22	108N63W20ABCC	6-14-79	29	2,600	430	160	55	230	14	600	550	19	.2	.01	.03	550	1,360	1,360	630	4.0	2,100	6.9
23	108N63W35BBAC	8-8-78	27	30	410	100	33	70	9.4	420	160	23	.2	.09	--	200	--	631	390	1.6	880	8.0
Corsica aquifer																						
24	101N64W 4DACA	8-29-79	28	1,200	2,800	240	58	450	31	110	1,700	78	.4	.00	.00	2,600	--	2,650	840	6.8	3,300	7.2
Minor aquifer																						
--	107N65W13ADBD	6-19-79	32	150	2,400	190	46	79	14	480	420	10	.3	.00	.00	470	860	1,030	670	1.3	1,490	7.0
BEDROCK AQUIFERS																						
Niobrara aquifer																						
25	107N63W20DDBD	8-28-79	21	240	80	40	15	530	14	790	500	86	.7	.00	.00	2,600	--	1,600	160	18	2,270	7.6
26	104N63W 2AADD	7-26-78	20	190	20	41	14	460	15	560	630	80	.8	.00	.00	3,500	--	1,540	160	16	2,450	7.8
27	103N66W14BCDB	8-31-77	13	240	60	21	7.0	770	12	680	220	660	1.9	.02	--	5,200	--	2,050	81	37	--	7.8
28	103N65W11CDAC	8-30-79	11	90	20	21	7.6	750	11	620	590	380	1.8	.01	.04	5,100	--	1,780	84	36	3,300	7.7
29	103N64W17DDCD	7-31-79	18	440	80	71	85	570	19	480	980	73	.8	.59	.00	3,900	--	2,060	530	11	3,000	7.5
Codell aquifer																						
30	104N64W 3AAAA	7-26-78	7.6	80	20	11	4.0	700	9.7	670	480	360	1.3	.00	.00	4,900	--	1,910	44	46	3,150	8.3
31	103N64W15DDCC	9-1-77	9.2	80	20	27	9.8	570	13	550	810	60	1.4	.00	.05	4,600	1,750	1,780	110	24	2,480	7.9
32	102N63W31CBCA	8-31-77	8.7	930	40	120	37	360	27	390	910	16	.8	.00	--	3,300	--	1,680	450	7.4	2,200	7.9

- 1/ Field analysis.
- 2/ South Dakota Department of Environmental Protection.
- 3/ South Dakota State Chemist, Vermillion, S. Dak.
- 4/ Phosphorous (total as P).

Sample number		Reported in milligrams per liter (mg/L) except as indicated. One milligram per liter is approximately equal to one part per million. One microgram per liter (µg/L) is approximately equal to one part per billion.																					
Location	Date	Silica (SiO ₂)	Iron (Fe) (µg/L)	Manganese (Mn) (µg/L)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate plus nitrite (dissolved as N)	Orthophosphorus (dissolved as P)	Boron (B) (µg/L)	Dissolved solids		Total hardness (Ca, Mg)	Sodium-adsorption ratio (SAR)	Specific conductance (micromhos per centimeter at 25°C)	pH (units)		
																Residue at 180°C	Calculated						
BEDROCK AQUIFERS (Cont.)																							
Dakota aquifer																							
33	103N66W15AAAA	8-31-77	10	3,800	160	290	76	200	27	170	1,200	86	2.1	0.00	0.00	500	2,090	1,990	1,000	2.7	2,420	7.5	
34	105N63W33CDBB	9-1-77	10	2,000	140	340	83	130	26	170	1,200	76	2.4	.00	.00	350	--	1,950	1,200	1.6	2,380	7.5	
35	108N67W 7DDDB	6-20-79	10	4,700	200	360	85	110	21	162	1,300	60	2.9	.03	.00	280	--	2,030	1,300	1.4	2,650	7.2	
36	107N65W 5BDBA	7-25-79	11	5,100	130	340	89	130	21	194	1,300	59	2.3	--	--	420	2,140	2,060	1,200	1.6	2,440	7.4	
37	108N65W11BBD	8-22-79	9.2	1,100	90	210	59	360	21	160	1,200	92	2.1	.01	.00	850	--	2,040	770	5.7	2,700	7.7	
--	101N66W34BB	8-30-79	8.3	3,300	170	370	100	110	21	160	1,300	130	2.8	.06	.01	230	2,220	2,130	1,300	1.3	2,750	6.7	

Instruction to Newspaper - Publish first publication of the following Notice on or before **August 13, 1987** with 2nd publication 1 week later. The applicant is responsible for payment.

NOTICE OF HEARING on Application No. **5147-3** to Appropriate Water
~~and/or to Amend Water Permit or Water Right No. _____~~

Notice is hereby given that **National Food Corporation** whose mailing address is **po Box 33845, Seattle, Washington 98133, South Dakota** has made an application for a permit to appropriate 0.22 cubic feet of water per second from 2 wells (Codell and/or Dakota Sandstone Formations) 300 and/or 700 feet deep to be located in the W₁SE₄ Section 19-T103N-R63W. The water is to supply a commercial hen house egg-laying facility and egg processing facility owned by National Food Corporation to be located in the S₁NE₄, SE₄ Section 19; NE₄ Section 30; all in T103N-R63W.

Pursuant to SDCL 46-2A-2 the Chief Engineer of the Water Rights Division recommends **APPROVAL** of Application No. **5147-3/with qualifications** because 1) unappropriated water is available, 2) will be no unlawful impairment of existing rights, 3) is beneficial use of water and 4) is in the public interest.

This application will be considered by the Water Management Board at **room 216, Joe Foss Building, 523 E. Capitol, Pierre, South Dakota, September 9 19 87** at 10:00 am.

The recommendation of the Chief Engineer is not final or binding upon the Board and the Board is authorized to 1) approve, 2) approve with qualifications, 3) defer, or 4) deny this application after it reaches a conclusion based upon facts presented at the public hearing. Any interested person who may be affected by a Board decision and who intends to participate in the hearing before the Board and present evidence or cross-examine witnesses according to SDCL 1-26, must file a written petition with BOTH the applicant and the Chief Engineer by **August 28, 1987**. The petition may be informal, but it must include a statement describing the petitioners interest in the application, the reasons for the petitioner's opposition to or support of the application, and the signature and mailing address of the petitioner or his legal counsel if legal counsel is obtained. The applicant need not file a petition.

This application is made pursuant to the provisions of SDCL 46-1-1 thru 46-1-9, 46-1-12 thru 46-1-15; 46-2-3.1, 46-2-9, 46-2-11, 46-2-13, 46-2-17; 46-2A-1 thru 46-2A-10, 46-2A-12, 46-2A-14, 46-2A-15; 46-5-1 thru 46-5-11, 46-5-13 thru 46-5-15, 46-5-24, 46-5-25, 46-5-30.2 46-5-30.4, 46-5-31; ~~(ground)~~ 46-6-3, 46-6-3.1, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14; ~~(future use)~~ 46-5-38 thru 46-5-40; ~~(transfer lands)~~ 46-5-30.4, 46-5-33 thru 46-5-35; ~~(10,000 AFA)~~ 46-5-20.1, 46-5-8.1; and Board Rules ARSD 74:02:01:01 thru 74:02:01:15, ~~(future use)~~ 74:02:01:24 thru 74:02:01:25; ~~(10,000 AFA)~~ 74:02:01:15:02 thru 74:02:01:15:05.

This hearing is an adversary proceeding. The applicant or any person, after filing a petition, has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and the State Supreme Court as provided by law.

Any person wishing a copy of the Chief Engineer's recommendation, further information on this application or to assure access to the hearing by the handicapped can contact the Water Rights Division, DWNr, Joe Foss Bldg, Pierre SD (605 773-3352) for assistance prior to the hearing date. The time of the hearing will be automatically extended for at least twenty days upon written request of the applicant or any person who has filed a petition to oppose or support the application. The request for extension must be filed with the Chief Engineer by **August 28, 1987**.

No. 5147-3

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
County Aurora) ss.

I, Edward Van Genderson hereby

certify that the annexed printed copy of Notice of Intent to Appropriate

Water was taken from the South Dakota Mail

A newspaper which during the whole time of publication of said notice
herein after stated, has been and is printed and published in the _____

South Dakota Mail of Plankinton

County of Aurora and State of South Dakota;
that the said notice was published in said newspaper on the following
two dates:

Aug. 13, 1987

Aug. 20, 1987

Edward Van Genderson
(Signature)

Publisher

(Title)

Aug. 20, 1987
(Date Signed)

Cost of Printing: \$43¹⁸

NOTICE OF HEARING

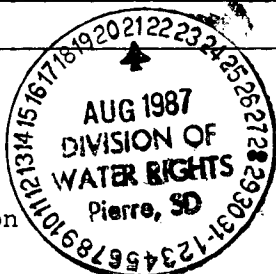
ON APPLICATION NO. 5147-3
TO APPROPRIATE WATER

Notice is hereby given that National Food Corporation whose mailing address is PO Box 33745, Seattle, Washington 98133, has made an application for a permit to appropriate 0.22 cubic feet of water per second from 2 wells (Codell and/or Dakota Sandstone Formations) 300 and/or 700 feet deep to be located in the W $\frac{1}{2}$ SE $\frac{1}{4}$ Section 19-T103N-R63W. The water is to supply a commercial hen house egg-laying facility and egg processing facility owned by National Food Corporation to be located in the S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ Section 19; NE $\frac{1}{4}$ Section 30; all in T103N-R63W.

Pursuant to SDCL 46-2A-2 the Chief Engineer of the Water Rights Division recommends APPROVAL of Application No. 5147-3 with qualifications because 1) unappropriated water is available, 2) will be no unlawful impairment of existing rights, 3) is beneficial use of water and 4) is in the public interest.

This application will be considered by the Water Management Board at room 216, Joe Foss Building, 523 E. Capitol, Pierre, South Dakota, September 9, 1987 at 10:00 am.

The recommendation of the Chief Engineer is not final or binding upon the Board and the Board is authorized to 1) approve, 2) approve with qualifications, 3) defer, or 4) deny this application after it reaches a conclusion based upon facts presented at the public hearing. Any interested person who may be affected by a Board decision and who intends to participate in the hearing before the Board and present evidence or cross-examine witnesses according to SDCL 1-26, must file a written petition with BOTH the applicant and the Chief Engineer by August 28, 1987. The petition may be informal, but it must include a statement describing the petitioners interest in the application, the reasons for the petitioner's opposition to or support of the application, and the signature and mailing address of the petitioner or his legal counsel if legal counsel is obtained. The applicant need not file a petition.



This application is made pursuant to the provisions of SDCL 46-1-1 thru 46-1-9, 46-1-12 thru 46-1-15; 46-2-3.1 46-2-9, 46-2-11, 46-2-13, 46-2-17; 46-2A-1 thru 46-2A-10, 46-2A-12, 46-2A-14, 46-2A-15; 46-5-1 thru 46-5-11, 46-5-13 thru 46-5-15, 46-5-24, 46-5-25, 46-5-30.2, 46-5-30.4, 46-5-31; 46-6-3, 46-6-3.1, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14; and Board Rules ARSD 74:02:01:01 thru 74:02:01:15.

This hearing is an adversary proceeding. The applicant or any person, after filing a petition, has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and the State Supreme Court as provided by law.

Any person wishing a copy of the Chief Engineer's recommendation, further information on this application or to assure access to the hearing by the handicapped can contact the Water Rights Division, DWNR, Joe Foss Bldg., Pierre, SD (605 773-3352) for assistance prior to the hearing date. The time of the hearing will be automatically extended for at least twenty days upon written request of the applicant or any person who has filed a petition to oppose or support the application. The request for extension must be filed with the Chief Engineer by August 28, 1987.

OFFICES OF THE
STATES ATTORNEY
AURORA COUNTY
PLANKINTON, SOUTH DAKOTA
57368
Phone 605 - 942-7725



August 26, 1987

Chief Engineer
Water Rights Division
Water Management Board
Room 216
Joe Foss Building
523 East Capitol
Pierre, SD 57501

Dear Sir:

Please find enclosed the original of a Petition to Support Application of National Foods Corporation for the appropriation of water from wells to be drilled in Section 30-103-63 in Aurora County, filed on behalf of the Board of County Commissioners of Aurora County.

Very Truly Yours,

JOHN R. STEELE
Aurora County States Attorney

JRS:lmc
Enc.

SOUTH DAKOTA WATER MANAGEMENT BOARD

STATE OF SOUTH DAKOTA) PETITION TO SUPPORT
:SS APPLICATION TO APPROPRIATE WATER
COUNTY OF AURORA)



The Board of County Commissioners of Aurora County, a political subdivision of the State of South Dakota, petitions the South Dakota Water Management Board to be heard in support of the application of National Foods Corporation to appropriate water for two wells to be located in Section 30, Township 103 North, Range 63 West of the 5th P.M., Aurora County, South Dakota.

The reasons for petitioners support of the application are that the appropriation of water will enable the applicant to locate an egg production facility in Aurora County which would provide significant economic benefits to the citizens of the county including employment opportunities and an improved market for feed grains in the area, and that petitioners believe that the water could be appropriated by applicant without detriment to existing domestic, agricultural or municipal uses of water.

That the petitioner's mailing address is:

Board of County Commissioners
P.O. Box 397
Plankinton, SD 57368

And that its legal counsel is:

John R. Steele
Aurora County State's Attorney
P.O. Box 577
Plankinton, SD 57368-0577

Dated this 26th day of August, 1987.

Board of County Commissioners
of Aurora County

BY: David E. Johnson
Chairman

CERTIFICATE OF SERVICE

The undersigned hereby certifies that he is the duly elected, qualified, and acting State's Attorney for Aurora County, South Dakota; and that on the 26th day of August, 1987, he mailed a true, correct, and complete copy of the above and foregoing Petition to Support Application to Appropriate Water, by first class mail, with postage thereon prepaid, in an envelope securely enclosed and properly addressed for that purpose, to National Foods Corporation at its last known post office address as follows, to-wit: P.O. Box 33745, Seattle, WA, 98133.

John R. Steele
John R. Steele

August 27, 1987
(date)

page 1 of

Parties of Record before Water Management Board regarding
Water Permit Application No. 5147-3, National
Food Corporation

FOR:

AGAINST:

1. Brian V. Bookey, Secretary
National Food Corporation
P.O. Box 33745
Seattle, WA 98133

2. Board of County Commissioners
P.O. Box 397
Plankinton, SD 57368
represented by :

John R. Steele
Aurora Co. State's Attorney
P.O. Box 577
Plankinton, SD 57368-0577

4. Raynie Pullman
Pullman Well Drilling
P.O. Box 188
Wolsey, SD 57384

Water Rights Division
DWHR, Joe Foss Bldg
Pierre, S.D. 57501



Pullman Well Drilling
P.O. Box 188

Wolsey, S.D. 57384
(605) 883-4532

We, Pullman Well Drilling, Would like to drill 2 wells needed by the National Food Corporation, for the laying hen business near Platteville. Therefore we are requesting to testify for said wells. We would then be available for any questions regarding said wells and to inform the Water Commission that these wells will not be a detriment to other wells in the area.

Pullman Well Drilling
DBA Raynie Pullman
Wolsey, S.D.

Raynie Pullman

WATER RIGHTS DIVISION
(605) 773-3352

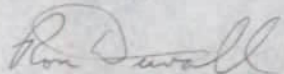
August 31, 1987

Brian V. Bookey, Secretary
National Food Corporation
P.O. Box 33745
Seattle, Washington 98133

Dear Mr. Bookey:

Enclosed is a copy of a petition to intervene in the hearing for Application No. 5147-3, National Food Corporation, submitted by Pullman Well Drilling. This letter is to inform you that this petitioner may testify at the hearing to be held by the Water Management Board.

Sincerely,



Ron Duval
Natural Resources Engineer

RD:ms
Enc.



Department of Water & Natural Resources

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501

Water Rights Division
605 773-3352

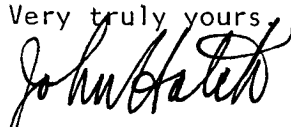
NOV 3 1987

National Food Corporation
P.O. Box 33745
Seattle, Washington 98133

Dear Sir:

Enclosed herewith is your Water Permit No. 5147-3 as approved by the Water Management Board authorizing you to construct your water diversion system and the water to beneficial use, not exceeding the limits as specified in said Water Permit No. 5147-3.

Also enclosed is Form 10, Notice of Completion of Works and Application of Water to Beneficial Use, which you are to complete and submit to the Chief Engineer when you have completed the system and/or have put the water to beneficial use. An inspection can then be scheduled so that your Water License may be issued to you, thus completing your acquisition of a Water Right.

Very truly yours,


JOHN HATCH, Chief Engineer
Water Rights Division

JH: ms

enclosure

PLEASE NOTE: Certain changes can be made in your permit within the five year construction period, usually without affecting the priority date provided an application to amend your permit is made within the five year period-i.e. changes in location or number of diversion points (wells) or location of land to be irrigated. Well locations for wells into the same aquifer can be moved up to 660 feet without application.

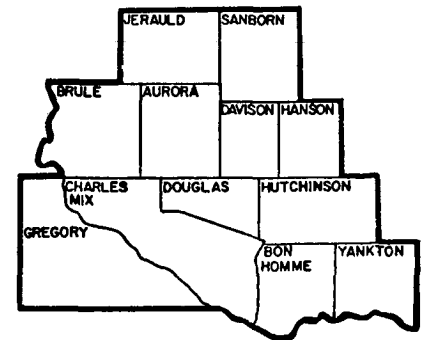
Applications to amend a permit after the five year construction period will be assigned a new priority date. Applications to change water sources, to add lands or increase original diversion rates, if approved will usually receive the date of the new application as a priority date regardless of the five year construction period.

Planning and Development District III

P.O. Box 687
Yankton County Courthouse
Yankton, South Dakota 57078
(605) 665-4408

DIRECTOR:
Greg Henderson

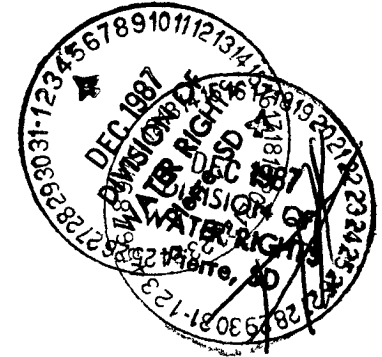
EXECUTIVE BOARD:
J.C. Engelmeyer, Chairman
Tom Callan, Vice-Chairman
George Mueller, Secretary
Larry McManus, Treasurer
Dan Cunningham
Lex Weller
Rex Winter



An association of local governments

December 3, 1987

Mr. John Hatch
Division of Water Rights
South Dakota Department of Water & Natural
Resources
Joe Foss Building
523 East Capitol
Pierre, SD 57501



RE: National Food Poultry Project
Aurora County

Dear Mr. Hatch:

As you are aware, my agency is working with Aurora County on an eight-step decision-making process pertaining to Executive Order 11990 (wetland impacts). Step four of the process involves a review of project impacts. I would appreciate your comments concerning the following questions.

- 1) If National Food follows the provisions of its water right permit, does the project present a significant threat to the water quality in Fish Lake?
- 2) What actions or steps will you take to ensure compliance with the water right permit conditions?

It would be helpful if I received a response before December 12, 1987. The first public comment period in the eight-step process expires on that date. If you have any questions, please call me.

Thank you.

Sincerely,

Greg Henderson
Director

cc: Fred Baatz, GOED, Pierre

ag



Department of Water & Natural Resources

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

December 10, 1987

Greg Henderson, Director
Planning and Development District III
PO Box 687
Yankton SD 57078

Dear Mr. Henderson:

I am writing in response to your questions on the National Foods Water Permit No. 5147-3. The conditions of the permit are designed to prevent pollution of both surface and ground water which would include Fish Lake. The Environmental Quality Division will review and if acceptable approve plans and specifications for the project prior to construction and a waste management plan prior to operation.

Compliance with Water Permit Qualifications will be checked during on-site and area inspections and monitoring.

Please advise if we may be of further assistance.

Very truly yours,

A handwritten signature in dark ink, appearing to read "John Hatch". The signature is written in a cursive, flowing style.

JOHN HATCH, Chief Engineer
Water Rights Division
605 773-3352

cc: Fred Baatz

REPORT ON INSPECTION OF PERMIT NO. 6018-3

Other permit(s) associated with the project: 5147-3

DATE OF INSPECTION: 6-26-95

NAME & ADDRESS OF INSPECTION CONTACT/

RELATIONSHIP TO PERMIT HOLDER, IF APPLICABLE: Jerry Bookey, CEO for National Foods Corporation (Plankinton, SD).

NAME & ADDRESS OF PERMIT HOLDER: National Foods Corporation, PO Box 33745, Seattle, WA 98133 & RR3 Box 32, Plankinton, SD 57368.

DIVERSION POINTS LEGAL LOCATIONS: #1: 500 feet S and 2250 feet W (SW1/4 NE1/4) from the NE corner of Section 19; #2: 2300 feet N and 2310 feet W (NW1/4 SE1/4) from the SE corner of Section 19; both in T103N R63W.

WELL INFORMATION:

1) Well Drilling Firm: Pullman Well Drilling

2) No. of Wells 2

3) Depth(s) 250 & 255 feet

4) Well log is available Y

Casing:

1) Diameter 8 inches

2) Length 220 feet

3) Type PVC

Screen:

1) Type PVC

2) Length 30 (N) & 34 (S) feet

3) Static water level 108 feet

Pumps:

1) Make submersibles

2) Model ?

3) Capacity 50 (N) & 75 (S) GPM

Motors:

1) Make Submersibles

2) Model Nos. ?

3) Horsepower ratings 5 hp

BOOSTER PUMPS: (2 identical)

Pumps:

1) Make Armstrong

2) Serial No. 500 670

3) Capacity 125 GPM

Motors:

1) Make US Electrical

2) Model Nos. 213JP

3) Horsepower ratings 10 hp

DISTRIBUTION LINES OR CANALS:

- 1) Type **PVC** 2) Size **3** inches 3) Length **600** feet

SYSTEM USE:

Supplies water to 1.1 million chickens in egg laying hen houses in Aurora County, South Dakota.

Comments: There is a 200,000 gallon storage tank located next to the North well which is used for back-up in an emergency situation. An application was made on February 9, 1996 for an additional 0.05 cfs (25 GPM) and to correct the location of the north well. The well was described as being in the NW1/4 SE1/4 of Section 19; Its actual location is in the SW1/4 NE1/4 of the same Section. Water Permit No. 5147-3 will be incorporated into No. 6018-3 during licensing.

PERMIT QUALIFICATIONS AND REGULATIONS:

- 1) Soil and water permit lands agree with lands being irrigated and lands listed on permit **NA**
- 2) Special qualifications to permit being abided by **Y**
- 3) All structures, wells and lands on map **Y**
- 4) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period **NA**

RECEIPT

415432

Division of Water Rights

South Dakota Department of Environment and Natural Resources

Pierre, _____ August 6, 19 97

RECEIVED OF National Foods Corporation, P.O. Box 33745, Seattle, WA 98133

the following amount in fees for services rendered as provided for by law:

Fee for Application for Permit No. _____ to Appropriate Water, to construct and to put water to beneficial use _____		
Fee for Application for Permit No. _____ to Appropriate Water, for Future Use _____		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. <u>5447-3 and 6418-3</u>	50	00
Fee for Filing Transfer Form _____		
Fee for Filing Extension Request _____		
Fee for _____		

(Any Other Work Provided by Law)	Total	50 00

By John Hatah (Signature)
Chief Engineer

Permit No. 6018-3 & 5147-3

James River - Water District

Report Of Examination Of Works And/Or Application of Water To Beneficial Use

TO: Chief Engineer, Water Rights Program, DENR, Foss Bldg., Pierre, SD 57501

I have this day, **June 26, 1995**, made a thorough examination of the water use system constructed by **National Foods Corporation of PO Box 33745, Seattle, WA 98133 & RR3 Box 32, Plankinton, SD 57368** holder of Permit No. **6018-3 & 5147-3**, bearing the priority of **August 6, 1997 & August 4, 1987** authorizing the diversion of **0.05 & 0.22** cu. ft. of water per second from **groundwater** for **commercial** purposes, in **Aurora** County.

I have to report on the conditions of the same as follows:

A. Works used to divert the water:

2 submersible pumps with a combined pumping capacity of 125 GPM.

B. Works used to transport water to place of use:

600 feet of 3 inch PVC and numerous sizes of PVC inside & between the chicken barns.

C. Works used to apply water to beneficial use:

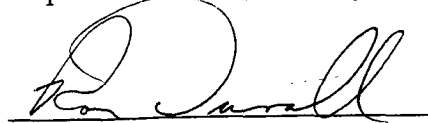
1.1 million egg laying chickens.

The system is in the following condition **excellent**. The point of diversion is located **#1: 500 feet S and 2250 feet W (SW1/4 NE1/4) from the NE corner of Section 19; #2: 2300 feet N and 2310 feet W (NW1/4 SE1/4) from the SE corner of Section 19; both in T103N R63W.** The works are capable of diverting and conveying to the place of use **0.27** cfs which is to be used for **commercial** use and the license should be issued for **0.27** cfs.

Applicable permit qualifications have been complied with: Yes **X** No

Exceptions to compliance are: **None**

Inspected **June 26, 1995** by Barry A McLaury, Natural Resources Scientist. Inspection report reviewed by:



Ron Duvall
Natural Resources Engineer
DENR, Water Rights Program

10/21/97
date



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

NOV 19 1997

5549-3 and 6018-3

National Foods Corporation
Attn: Brian V. Bookey, Secretary
PO Box 33745
Seattle WA 98133

Dear Mr. Bookey:

Enclosed are Water License No. 5549-3, Water Permit & Water License No. 6018-3, and receipts for payment of the fee assessed for the inspection and issuance of the licenses. The applicable portions of Water Permit No. 5147-3 have been incorporated into Water License No. 6018-3. These water licenses are the final documents which complete the process of obtaining a water right.

As long as National Foods Corporation uses the water beneficially, as stated in the Water Licenses, State Water Laws provide that you have a continuing right to use the water.

Very truly yours,

JOHN HATCH, Chief Engineer
Water Rights Program
605 773-3352

ks

enclosures