

Technical Document LA24048

Part 2 – Technical Requirements



Application under the *Agricultural Operation Practices Act* for a confined feeding operation, manure collection area, and/or manure storage facility(ies)

NRCB USE ONLY	Application number	Legal land description
<input type="checkbox"/> Approval <input checked="" type="checkbox"/> Registration <input type="checkbox"/> Authorization <input type="checkbox"/> Amendment	<u>LA24048</u>	<u>NE 26-9-21 W4M</u>

APPLICATION DISCLOSURE

This information is collected under the authority of the *Agricultural Operation Practices Act (AOPA)*, and is subject to the provisions of the *Freedom of Information and Protection of Privacy Act*. This information is public unless the NRCB grants a written request that certain sections remain private.

Any construction prior to obtaining an NRCB permit is an offence and is subject to enforcement action, including prosecution.

I, the applicant, or applicant's agent, have read and understand the statements above, and I acknowledge that the information provided in this application is true to the best of my knowledge.

<u>Nov 20, 2024</u> Date of signing	 <u>John Erkelens (Simon John Erkelens)</u> Print name
<u>Craft Quality Poultry Ltd</u> Corporate name (if applicable)	

GENERAL INFORMATION REQUIREMENTS

Proposed facilities: list all proposed confined feeding operation facilities and their dimensions. Indicate whether any of the proposed facilities are additions to existing facilities. (attach additional pages if needed)	
Proposed facilities	Dimensions (m) (length, width, and depth)
Renovate current Quonset to house ²⁰⁰⁰⁰ Quail	Quail layer barn 15.2 m x 27.4 m 50' x 90'
Renovate current chicken coop to house ³⁰⁰ layers	Chicken layer barn 4.6 m x 9.1 m 15' x 30'
Manure pad w/pony wall (1.25m)	7-3m x 7-3m

Existing facilities: list ALL existing confined feeding operation facilities and their dimensions		
Existing facilities	Dimensions (m) (length, width, and depth)	NRCB USE ONLY
N/A		

NRCB USE ONLY

Application for a new CFO. Existing buildings are not currently used for livestock but are proposed to be used to confine quail layers and chicken layers. The buildings both have concrete floors. Core samples will be taken, and if they do not meet the concrete requirements specified in the conditions, new concrete will be poured.

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DECLARATION AND ACKNOWLEDGMENT OF APPLICANT CONCERNING WATER ACT LICENCE

issued by Alberta Environment and Protected Areas (EPA) for a confined feeding operation (CFO)

Date and sign one of the following four options

OPTION 1: Applying through the NRCB for both the AOPA permit and the Water Act licence

I **DO** want my water licence application coupled to my AOPA permit application.

Signed this ____ day of _____, 20____.

Signature of Applicant or Agent

OPTION 2: Processing the AOPA permit and Water Act licence separately

1. I (we) acknowledge that the CFO will need a new water licence from EPA under the *Water Act* for the development or activity proposed in this AOPA application.
2. I (we) request that the NRCB process the AOPA application **independently of** EPA's processing of the CFO's application for a water licence.
3. In making this request, I (we) recognize that, if this AOPA application is granted by the NRCB, the NRCB's decision will not be considered by EPA as improving or enhancing the CFO's eligibility for a water licence under the *Water Act*.
4. I (we) acknowledge that any construction or actions to populate the CFO with livestock pursuant to an AOPA permit in the absence of a *Water Act* licence will **not** be relevant to EPA's consideration of whether to grant the *Water Act* licence application.
5. I (we) acknowledge that any such construction or livestock populating will be at the CFO's sole risk if the *Water Act* licence application is denied or if the operation of the CFO is otherwise deemed to be in violation of the *Water Act*. This risk includes being required to depopulate the CFO and/or to cease further construction, or to remove "works" or "undertakings" (as defined in the *Water Act*).
6. **AS RELEVANT:** I (we) acknowledge that the CFO is located in the South Saskatchewan River Basin and that, pursuant to the *Bow, Oldman and South Saskatchewan River Basin Water Allocation Order* [Alta. Reg. 171/2007], this basin is currently closed to new surface water allocations.
7. **Provide:** Water licence application number(s) _____

Signed this ____ day of _____, 20____.

Signature of Applicant or Agent

OPTION 3: Additional water licence not required

1. I (we) declare that the CFO will not need a new licence from EPA under the *Water Act* for the development or activity proposed in this AOPA application.
2. **Provide:** Water license number(s) or water conveyance agreement details SMRID-5 acres permanent water right
COLRWA - 1 unit Potable Water - 700 imp gallons/day

Signed this 20 day of November, 2024.

Signature of Applicant or Agent

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OPTION 4: Uncertain if *Water Act* licence is needed; acknowledgement of risk (for existing CFOs only)

1. At this time, I (we) do not know whether a new water licence is needed from EPA under the *Water Act* for the development or activity proposed in this AOPA application.
2. If a new *Water Act* licence is needed, I (we) request that the NRCB process the AOPA application **independently of** EPA's processing of the CFO's application for a water licence.
3. In making this request, I (we) recognize that, if this AOPA application is granted by the NRCB, the NRCB's decision will not be considered by EPA as improving or enhancing the CFO's eligibility for a water licence under the *Water Act*.
4. I (we) acknowledge that any construction or actions to populate the CFO with additional livestock pursuant to an AOPA permit in the absence of a *Water Act* licence will **not** be relevant to EPA's consideration of whether to grant my *Water Act* licence application, if a new water licence is needed.
5. I (we) acknowledge that any such construction or livestock increase will be at the CFO's sole risk if the *Water Act* licence application is denied or if the operation of the CFO is otherwise deemed to be in violation of the *Water Act*. This risk includes being required to depopulate the CFO and/or to cease further construction, or to remove "works" or "undertakings" (as defined in the *Water Act*).
6. **AS RELEVANT:** I (we) acknowledge that the CFO is located in the South Saskatchewan River Basin and that, pursuant to the *Bow, Oldman and South Saskatchewan River Basin Water Allocation Order* [Alta. Reg. 171/2007], this basin is currently closed to new surface water allocations.
7. **Provide:** Water license number(s) or water conveyance agreement details _____

Signed this ____ day of _____, 20____.

Signature of Applicant or Agent

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Application under the Agricultural Operation Practices Act for a confined feeding operation, manure collection area, and/or manure storage facility(ies)

GENERAL ENVIRONMENTAL INFORMATION

(complete this section for the worst case of the existing facility which is the closest to water bodies or water wells and for each of the proposed facilities)

Facility description / name (as indicated on site plan)

Existing: _____ Proposed 1: Renovate Quonset to house 20,000 ~~12000~~ gal. w/ manure pad
 Proposed 2: Renovate Chicken Coop to house 300 hens Proposed 3: _____

Facility and environmental risk information		Facilities				NRCB USE ONLY	
		Existing	Proposed 1	Proposed 2	Proposed 3	Meets requirements	Comments
Flood plain information	What is the elevation of the floor of the lowest manure storage or collection facility above the 1:25 year flood plain or the highest known flood level?	<input type="checkbox"/> >1 m <input type="checkbox"/> ≤ 1 m	<input checked="" type="checkbox"/> >1 m <input type="checkbox"/> ≤ 1 m	<input checked="" type="checkbox"/> >1 m <input type="checkbox"/> ≤ 1 m	<input type="checkbox"/> > 1 m <input type="checkbox"/> ≤ 1 m	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES with exemption	Not in flood plain
	How many springs are within 100 m of the manure storage facility or manure collection area?		0	0		<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES with exemption	No springs observed during site visit
Surface water information	How many water wells are within 100 m of the manure storage facility or manure collection area?		0	0		<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES with exemption	Nearest well is 597m from MCA/MSF
	What is the shortest distance from the manure collection or storage facility to a surface water body? (e.g., lake, creek, slough, seasonal)		89 m to dugout - dugout to be backfilled	94 m to current dugout		<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES with exemption	Eight Mile Lake 3.5 km NE
Groundwater information	What is the depth to the water table?	33 m				<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES with exemption	No evidence of a shallow water table
	What is the depth to the groundwater resource/aquifer you draw water from?	None				<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES with exemption	WW 106350 on parcel; well survey, no info WW ID 106348: UGR >50.29 m

Additional information (attach supporting information, e.g. borehole logs, records, etc. you consider relevant to your application)

See attached water well drilling report. Performed on NW corner of quarter.

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NRCB USE ONLY
ENVIRONMENTAL RISK SCREENING INFORMATION

ERST for **proposed** facilities

Facility	Groundwater score	Surface water score	File number
Quail barn	Low	Low	LA24048
Layer barn	Low	Low	LA24048
Manure pad	Low	Low	LA24048

ERST for **existing** facilities

Facility	Groundwater score	Surface water score	File number
None			

ERST related comments:

New CFOs that meet or exceed AOPA requirements are presumed to pose a low risk to surface water and groundwater

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NRCB USE ONLY

WATER WELL AND SURFACE WATER INFORMATION

Well IDs: 106350 (federal well survey) - located at NW corner of property

106348 - approx. 1 km E of property

Surface water related concerns from directly affected parties or referral agencies: YES NO

Groundwater related concerns from directly affected parties or referral agencies: YES NO

Water wells N/A

If applicable, exemption for 100 m distance requirements applied: YES NO Condition required: YES NO

Surface water N/A

If applicable, exemption for 30 m distance requirements applied: YES NO Condition required: YES NO

Water Well Exemption Screening Tool N/A

Water Well ID	Preliminary Screening Score	Secondary Screening Score	Facility

Groundwater or surface water related comments:



Imagery ©2024 Airbus, Maxar Technologies, S. Alberta MD€31s and Counties, Map data ©2024 50 m

Measure distance
Total distance: 597.06 m (1,958.85 ft)

water well (1936)

see attached ~~to~~ Well Drilling Report.



Water Well Drilling Report

[View in Metric](#) [Export to Excel](#)

GIC Well ID 106350
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 1936/06/23

The driller supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

GOWN ID

Well Identification and Location										Measurement in Imperial	
Owner Name KENNEY, F.		Address LETHBRIDGE			Town		Province		Country		Postal Code
Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description		
	NE	26	9	21	4						
Measured from Boundary of				GPS Coordinates in Decimal Degrees (NAD 83)				Elevation			
_____ ft from				Latitude <u>49.767171</u> Longitude <u>-112.739091</u>				_____ 2882.00 ft			
_____ ft from				How Location Obtained				How Elevation Obtained			
				Not Verified				Estimated			

Additional Information										Measurement in Imperial	
Distance From Top of Casing to Ground Level		_____ in									
Is Artesian Flow		_____								Is Flow Control Installed	
Rate		_____ igpm								Describe	
Recommended Pump Rate		_____ 0.00 igpm								Pump Installed	
Recommended Pump Intake Depth (From TOC)		_____ 0.00 ft								Depth	
										Type	
										Make	
										H.P.	
										Model (Output Rating)	
Did you Encounter Saline Water (>4000 ppm TDS)		_____								Well Disinfected Upon Completion	
Remedial Action Taken		_____								Geophysical Log Taken	
		_____								Submitted to ESRD	
		_____								Sample Collected for Potability	
		_____								Submitted to ESRD	
Additional Comments on Well											

Yield Test			Taken From Ground Level	Measurement in Imperial
			Depth to water level	
Test Date	Start Time	Static Water Level		
1936/06/23	12:00 AM	100.00 ft		
			Pumping (ft)	Recovery (ft)
			Elapsed Time	
			Minutes:Sec	
Method of Water Removal				
Type _____				
Removal Rate _____ igpm				
Depth Withdrawn From _____ 0.00 ft				
If water removal period was < 2 hours, explain why				

Water Diverted for Drilling		
Water Source	Amount Taken	Diversion Date & Time
	ig	

Contractor Certification	
Name of Journeyman responsible for drilling/construction of well	Certification No
UNKNOWN NA DRILLER	1
Company Name	Copy of Well report provided to owner
EWING F	Date approval holder signed

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DISTANCE OF ANY MANURE STORAGE FACILITY (EXISTING OR PROPOSED) TO NEIGHBOURING RESIDENCES

Neighbour name(s)	Legal land description	Distance (m)	NRCB USE ONLY				
			Zoning (LUB) category	MDS category (1-4)	Distance (m)	Waiver attached (if required)	Meets regulations
#5 Alberta Transportation	NE-26-9-21-4	179 m	Rural Ag	1	154 m		Yes
#6 Alberta Transportation	N-25-9-21-4	242 m	Rural Ag	1	226 m		Yes
M Van Herk	SW-25-9-21-4	637 m	Rural Ag	1	637 m		Yes
#1 B Horvath	SE-26-9-21-4	903 m	Rural Ag	1	948 m		Yes
B Coyne	SE-35-9-21-4	779 m	Rural Ag	1	755 m		Yes

Numbers correspond to properties/parcels labeled on page 15 of Technical Document LA24048

LAND BASE FOR MANURE AND COMPOST APPLICATION (complete only if an increase in livestock or manure production will occur)

Name of land owner(s)*	Legal land description	Usable area** (ha)	Soil zone ***	NRCB USE ONLY	
				Usable area (ha)	Agreement attached (if required)
Boston Farms	Section 19-10-19-W4	640	irrigated	568 ac/ 222 ha	Yes
	See attached agreement				
Total					

* If you are **not** the registered landowner, you must attach copies of land use agreements signed by all landowners.

** Available manure spreading area (excluding setback areas from residences, common bodies of water, water wells, etc. as identified in Agdex 096-5 [Manure Spreading Regulations](#))

*** Brown, dark brown, black, grey wooded, or irrigated

Additional information (attach any additional information as required)

Google Maps



Imagery ©2024 Airbus, Maxar Technologies, S. Alberta MDE31s and Counties, Map data ©2024 50 m

Measure distance
Total distance: 178.95 m (587.10 ft)

Map included by applicant showing distance of proposed quail barn to residence to the north, identified as property #5 owned by Alberta Transportation on pages 12 and 16 of Technical Document LA24048

Google Maps



Imagery ©2024 Airbus, Maxar Technologies, S. Alberta MD€31s and Counties, Map data ©2024 50 m

Measure distance
Total distance: 242.22 m (794.68 ft)

Map included by applicant showing distance of proposed quail barn to residence to the east, identified as property #6 owned by Alberta Transportation on pages 12 and 17 of Technical Document LA24048

EXCEPTING:

PLAN	NUMBER	HECTARES	ACRES	MORE OR LESS
ROAD WIDENING	8211294	0.209	0.515	

EXCEPTING THEREOUT ALL MINES AND MINERALS
AND THE RIGHT TO WORK THE SAME

Property #3

Short legal description: **LSD 13&14 of 26-9-21-W4**

LINC # 0017 855 942

MERIDIAN 4 RANGE 21 TOWNSHIP 9

SECTION 26

LEGAL SUBDIVISIONS 13 AND 14

IN THE NORTH WEST QUARTER

CONTAINING 32.4 HECTARES (80 ACRES) MORE OR LESS

EXCEPTING THEREOUT:

PLAN	NUMBER	HECTARES	ACRES	MORE OR LESS
ROAD WIDENING	8211294	0.209	0.515	

EXCEPTING THEREOUT ALL MINES AND MINERALS
AND THE RIGHT TO WORK THE SAME

Property #4

Short legal description: **Lot 1, Block 1, Plan 1710179**

LINC # 0037 468 725

DESCRIPTIVE PLAN 1710179

BLOCK 1

LOT 1

CONTAINING 48.36 HECTARES (119.50 ACRES) MORE OR LESS

EXCEPTING THEREOUT:

PLAN	NUMBER	HECTARES	(ACRES)	MORE OR LESS
SUBDIVISION	1710180	2.00	4.94	

EXCEPTING THEREOUT ALL MINES AND MINERALS

ATS REFERENCE: 4;21;9;35;SE

ATS REFERENCE: 4;21;9;26;NE

Property #5 (acreage to the north)

Short legal description: **Lot 2, Block, 1, Plan 1710180**

LINC # 0037 468 733

PLAN 1710180

BLOCK 1

LOT 2

EXCEPTING THEREOUT ALL MINES AND MINERALS

AREA: 2 HECTARES (4.94 ACRES) MORE OR LESS

ESTATE: FEE SIMPLE

ATS REFERENCE: 4;21;9;26;NE

Property #6

Short legal description: **Lot 1, Block 1, Plan 0611605**

LINC # 0033 059 577

PLAN 0611605

BLOCK 1

LOT 1

CONTAINING 62.4570 HECTARES(154.33 ACRES) MORE OR LESS

EXCEPTING THEREOUT:

HECTARES (ACRES) MORE OR LESS

A) PLAN 0810836 ROAD 0.208 0.51

EXCEPTING THEREOUT ALL MINES AND MINERALS

ATS REFERENCE: 4;21;9;25;N

Property #7

Short legal description: **LSD 11&12 of 25-9-21-W4**

LINC # 0033 059 783

MERIDIAN 4 RANGE 21 TOWNSHIP 9

SECTION 25

LEGAL SUBDIVISIONS 11 AND 12

CONTAINING 32.4 HECTARES(80 ACRES) MORE OR LESS

EXCEPTING THEREOUT:

HECTARES (ACRES) MORE OR LESS

A) PLAN 0810836 ROAD 0.209 0.52

EXCEPTING THEREOUT ALL MINES AND MINERALS

AND THE RIGHT TO WORK THE SAME

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NRCB USE ONLY

MINIMUM DISTANCE SEPARATION

Methods used to determine distance (if applicable): Google Earth

Margin of error (if applicable): +/- 3m

Requirements (m): Category 1: 121 m * Category 2: 161 m Category 3: 201 m Category 4: 322 m

Technology factor: YES NO

Expansion factor: YES NO

MDS related concerns from directly affected parties or referral agencies: YES NO

Section 3(3) of the Standards and Administration Regulation states that the minimum MDS is 150 m. The nearest residence to the north, indicated on pages 14 & 15 of Technical Document LA24048 as property #5, appears to be 154 m away. Condition required to ensure this requirement is met.

LAND BASE FOR MANURE AND COMPOST APPLICATION

Land base required: 17.3 ha/ 42.7 ac irrigated

Land base listed: 640 ac/ 259 ha

Area not suitable: 72 ac/37 ha (dry corners)

Available area 568 ac/ 222 ha

Requirement met: YES NO

Land spreading agreements required: YES NO

Manure management plan: YES NO If yes, plan is attached:

For determining MDS and manure production, NRCB and Alberta Agriculture and Irrigation have developed "Interim Guideline for Quail and Pheasants – Threshold Numbers and Factors for Calculating MDS – Feb. 9, 2017". It is presumed that two quail equate to one broiler chicken.

PLANS

Submitted and attached construction plans: YES NO

Submitted aerial photos: YES NO

Submitted photos: YES NO

GRANDFATHERING

Already completed: YES NO N/A

If already completed, see _____

This agreement is made on Nov 18, 2024 between

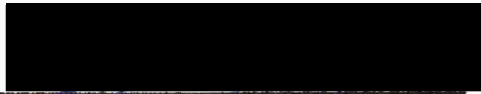
Boston Farms / Tony Bos
(landowner) and

Craft Quality Poultry Ltd (John and Sharon Erkelens)
(applicant)

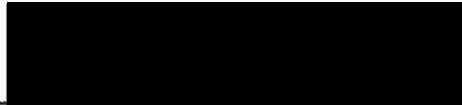
We do agree that if Craft Quality Poultry Ltd has excessive manure we will
take it to apply to our land. 640 acres

~~_____~~ The land mentioned is located at SECTION 19 -10-19 W4

The terms of the agreement will expire in 5 years and will need to be
revisited again.



John Erkelens



Tony Bos

Lethbridge, November 18, 2024

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NRCB USE ONLY

ALL SIGNATURES IN FILE

YES NO

DATES OF APPROVAL OFFICER SITE VISITS

November 22, 2024	

CORRESPONDENCE WITH MUNICIPALITIES AND REFERRAL AGENCIES

Date deeming letters sent: January 7, 2024

Municipality: Lethbridge County

letter sent response received written/email verbal no comments received

Alberta Health Services: N/A
 Sent AHS the application after receiving a response citing health concerns

letter sent response received written/email verbal no comments received

Alberta Environment and Parks: N/A

letter sent response received written/email verbal no comments received

Alberta Transportation: N/A

letter sent response received written/email verbal no comments received

Alberta Regulatory Services: N/A

letter sent response received written/email verbal no comments received

Other: SMRID N/A

letter sent response received written/email verbal no comments received

Other: ATCO, County of Lethbridge Rural Water Association Ltd., Alpha Bow Energy Ltd. N/A

letter sent response received written/email verbal no comments received

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SOLID MANURE, COMPOST, & COMPOSTING MATERIALS: Barns, feedlots, & storage facilities - Concrete liner

(complete a copy of this section for **EACH** barn, feedlot, and storage facility for solid manure, composting materials, or compost with a concrete liner)

Facility description / name (as indicated on site plan)

1. Quail Facility 50' x 90' w/ manure pad
2. Chicken Coop 15' x 30'

Manure storage capacity

	Length (m)	Width (m)	Depth below grade to the bottom of the liner (m)	NRCB USE ONLY Estimated storage capacity (m ³)
1.	7.315 m	7.315 m	0.15m	
2.	To be shared w/ Quail Facility Manure Pad.			
TOTAL CAPACITY				Manure pads are considered 9 months storage

1. Quail layer barn with manure pad: 15.2 m x 27.4 m and 7.3 m x 7.3 m
2. Chicken layer barn: 4.6 m x 9.1 m

I plan to use a short-term solid manure storage (STMS) as part of my manure storage and handling plan for this CFO. The AOPA requirements for STMS are set out in the NRCB Short-Term Solid Manure Storage Requirements Fact Sheet.

Surface water control systems

Describe the run-on and runoff control system

4" slope from front to back.

The quail barn and layer barn will have a roof and walls and the manure pad will have a pony wall which will control run-on and run-off

Liner protection

Describe how the physical integrity of the liner will be maintained

Fixed Concrete

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Requirements met: YES NO

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SOLID MANURE, COMPOST, & COMPOSTING MATERIALS: Barns, feedlots, & storage facilities - Concrete liner (cont.)

Concrete liner details

Concrete thickness <i>5.5"</i>	Method of sulphate protection: <i>Type 50</i>
Concrete strength <i>30 mpa for manure pad</i> <i>25 mpa</i>	Concrete reinforcement size and spacing <i>15 o/c</i>

Concrete requirements can be found in Technical Guideline Agdex 096-93

Guideline minimums:

Solid manure: 25MPa (D)

Solid manure (wet): 30MPa (C)

Method of sulphate protection:

Type 50 or Type 10 with fly ash or equivalent

NRCB USE ONLY

Requirements met: YES NO

Condition required: YES NO

Report attached: YES NO

Spoke with the applicant that the concrete for the manure pad needs to meet requirements for Category C as the pony wall does not prevent run on.

Additional information (attach as required)

NRCB USE ONLY

Nine month manure storage volume requirements met YES YES With STMS NO

Depth to water table: *No evidence of a shallow water table* Requirements met: YES NO

Depth to Uppermost groundwater resource: *50.29 m* Requirements met: YES NO

ERST completed: see ERST page for details

Surface water control systems

Requirements met: YES NO Details/comments:

Concrete liner details

There will be a condition requiring concrete for the proposed quail layer barn and the chicken layer barn meet requirements for category D (solid manure - dry) in Technical Guideline Agdex 096-93 "Non-Engineered Concrete Liners for Manure Collection and Storage Areas"

Condition requiring the concrete for the manure pad meet Category C (solid manure - wet) in Technical Guideline Agdex 096-93 "Non-Engineered Concrete Liners for Manure Collection and Storage Areas"

Leakage detection system required: YES NO If yes, please explain why.