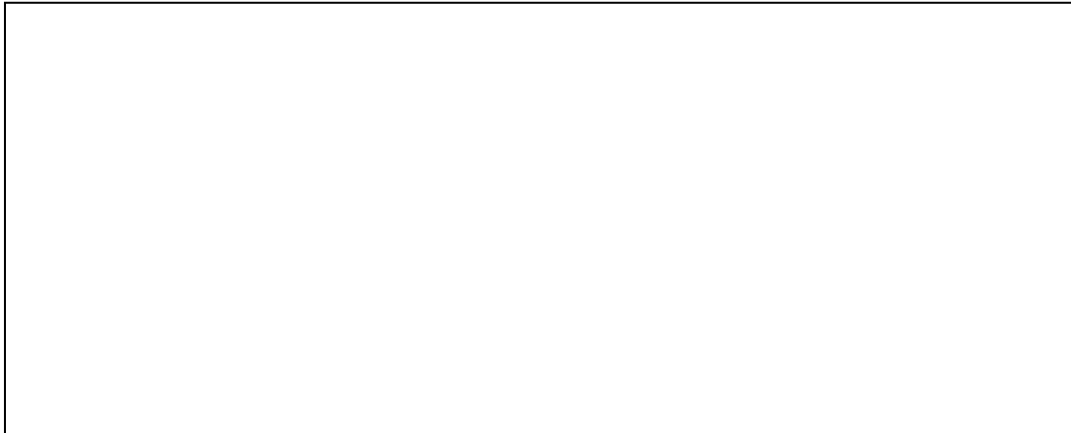




# 2005 Livestock Farm Practices Survey

## Turkey Producers



**CONFIDENTIAL**  
when completed

Collected under the  
authority of the  
Statistics Act,  
Revised Statutes of  
Canada, 1985,  
Chapter S-19.

To correct or make changes to this label → See below

**Ce questionnaire est disponible en français.**

### For interviewer use only

Fully completed	005	1	
Partial	005	4	
Refusal	005	2	
No contact	005	3	

In operation	004	00	
Change of operator	004	12	
Out of business	004	13	
Out of scope	004	99	

### TO THE RESPONDENT:

To improve overall air quality in Canada and worldwide, agriculture like other industries is asked to quantify emissions of ammonia into the atmosphere. The results of the survey will place Canada among other industrialized countries who have agreed to co-operate to improve air quality around the globe. Because pollutants travel long distances crossing many boundaries, international co-operation is essential for long-term air quality. The information obtained from the survey will guide researchers to improve efficiency of Nitrogen use on farms.

Your farm was selected at random for this survey from a list of turkey producers. While participation in this survey is voluntary, your cooperation is important to ensure that the information collected in this survey is as accurate and as comprehensive as possible.

Statistics Canada is prohibited by law from publishing any statistics which would divulge information obtained from this survey that relates to any identifiable business, institution or individual without their knowledge and consent. The data reported on this questionnaire will be treated in confidence, used for statistical purposes and published in aggregate form only.

This questionnaire on commercial turkey operations deals with feed protein, barn types, manure handling and spreading of manure. The person most knowledgeable about these items should complete the questionnaire.

**Please refer to the 2005 calendar year when answering questions unless specified otherwise.**

**Change or correction to the address label (if required)**

Are there any changes required to the address label?

11 Corporation name											14 Area code						
12 Operator name												15 Telephone					
13 Contact name												16 Telephone					
17 R.R.		18 P.O. Box				19 Number and street name											
20 Postal code				21 Post office (name of city, town or village where mail is received)													



Statistics Canada / Statistique Canada

**Canada**

FOR INFORMATION ONLY

**For questions about turkeys include the following:**

- All turkeys on your operation, regardless of ownership, including those that are custom fed or fed under contract for others.

**For questions about turkeys exclude the following:**

- Do not report turkeys which are owned by you but kept on a farm owned by someone else.

**Section 1 – Feeding and housing practices**

1. In 2005, what was the average number of turkeys on your farm operation at any one time (*average per cycle*)?

Turkeys<sub>1(O00101)</sub>

2. In 2005, how many production cycles did you have (*number of times the birds were replaced*)?

*Give to the nearest half-cycle, such as 2.5 cycles in 2005.*

.  Cycles<sub>1(O00201)</sub>

3. In 2005, what was the average number of days between production cycles (*when the barns were empty*)?

Days<sub>1(O00301)</sub>

4. In 2005, how many turkeys did your operation sell to market?

Turkeys<sub>1(O00401)</sub>

→ Answer questions 5 to 7

5. How many were less than 11.9 lb (5.4 kg)?

Birds<sub>1(O00501)</sub>

6. How many were between 11.9 and 19.8 lb (5.4 and 9 kg)?

Birds<sub>1(O00601)</sub>

7. How many were larger than 19.8 lb (9 kg)?

Birds<sub>1(O00701)</sub>

8. How many separate building(s) did you use to house your turkeys?

Building(s)<sub>1(O00801)</sub>

9. In 2005, what was the average temperature in the production part of your turkey building?

*If there is more than one turkey building, answer for the largest building.*

Summer  °C<sub>1(O00901)</sub> ---Or---  °F<sub>2(O00902)</sub>

Winter  °C<sub>3(O00903)</sub> ---Or---  °F<sub>4(O00904)</sub>

10. What type of ventilation system did you have in your turkey building(s)?

*Check all that apply.*

Fans switched on automatically with computer . . . . .  <sub>1(O01001)</sub>

Fans switched on automatically with thermostat . . . . .  <sub>2(O01002)</sub>

Fans switched on manually . . . . .  <sub>3(O01003)</sub>

Passive ventilation (side curtains, free air or vent panels) . . . . .  <sub>4(O01004)</sub>

Other, specify: \_\_\_\_\_ <sub>5(O01005)</sub>

11. Did you have filters on your vents or vent fans to control dust emissions in your turkey building(s)?

Yes..... 1(O01101)

No ..... 2(O01102)

<p>12. In 2005, what proportion of your turkey feed came from commercial feed suppliers?</p> <p>More than 75% <input type="checkbox"/>1(O01201) → Answer question 13</p> <p>25% to 75% .... <input type="checkbox"/>2(O01202) → Answer question 13</p> <p>Less than 25%. <input type="checkbox"/>3(O01203) ↓ Go to question 14</p> <p>None ..... <input type="checkbox"/>4(O01204) ↓ Go to question 14</p>	<p>13. What commercial feed products did you obtain?</p> <p><i>Check all that apply.</i></p> <p>Complete feed ..... <input type="checkbox"/>1(O01301)</p> <p>Protein supplements ..... <input type="checkbox"/>2(O01302)</p> <p>Amino acids ..... <input type="checkbox"/>3(O01303)</p> <p>Vitamin/mineral premixes ... <input type="checkbox"/>4(O01304)</p> <p>Other, <i>specify</i>: _____ 5(O01305)</p> <p>Don't know <input type="checkbox"/>6(O01306)</p>
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<p>14. Does the percentage (%) of crude protein content of your turkey diet change for each stage of production?</p> <p>Yes .. <input type="checkbox"/>1(O01401) → Answer questions 16 and 17</p> <p>No .... <input type="checkbox"/>2(O01402) ↓ Answer question 15</p> <p>15. What was the percentage (%) of crude protein content of the feed used for your turkeys?</p> <p><input style="width: 30px; height: 20px;" type="text"/> % crude protein <input type="checkbox"/>1(O01501)</p> <p>Don't know <input type="checkbox"/>2(O01502)</p> <p>↓ Go to question 18</p>	<p>16. In 2005, what was the percentage (%) of crude protein content of the feed used for your turkeys during each stage of production?</p> <p style="text-align: right;"><b>% crude protein</b></p> <p>First stage of production:..... <input style="width: 30px; height: 20px;" type="text"/><input style="width: 30px; height: 20px;" type="text"/> 1(O01601)</p> <p>Second stage of production: ..... <input style="width: 30px; height: 20px;" type="text"/><input style="width: 30px; height: 20px;" type="text"/> 2(O01602)</p> <p>Third stage of production:..... <input style="width: 30px; height: 20px;" type="text"/><input style="width: 30px; height: 20px;" type="text"/> 3(O01603)</p> <p>Fourth stage of production: ... <input style="width: 30px; height: 20px;" type="text"/><input style="width: 30px; height: 20px;" type="text"/> 4(O01604)</p> <p>Fifth stage of production:..... <input style="width: 30px; height: 20px;" type="text"/><input style="width: 30px; height: 20px;" type="text"/> 5(O01605)</p> <p>Sixth stage of production:..... <input style="width: 30px; height: 20px;" type="text"/><input style="width: 30px; height: 20px;" type="text"/> 6(O01606)</p> <p>Other, <i>specify</i>: _____ 7(O01607) <input style="width: 30px; height: 20px;" type="text"/><input style="width: 30px; height: 20px;" type="text"/> 8(O01608)</p> <p>Don't know <input type="checkbox"/>9(O01609)</p> <p>17. How many days did your turkeys stay in each stage of production?</p> <p style="text-align: right;"><b>Days</b></p> <p>First stage of production:..... <input style="width: 30px; height: 20px;" type="text"/><input style="width: 30px; height: 20px;" type="text"/> 1(O01701)</p> <p>Second stage of production:.. <input style="width: 30px; height: 20px;" type="text"/><input style="width: 30px; height: 20px;" type="text"/> 2(O01702)</p> <p>Third stage of production:..... <input style="width: 30px; height: 20px;" type="text"/><input style="width: 30px; height: 20px;" type="text"/> 3(O01703)</p> <p>Fourth stage of production: ... <input style="width: 30px; height: 20px;" type="text"/><input style="width: 30px; height: 20px;" type="text"/> 4(O01704)</p> <p>Fifth stage of production:..... <input style="width: 30px; height: 20px;" type="text"/><input style="width: 30px; height: 20px;" type="text"/> 5(O01705)</p> <p>Sixth stage of production:..... <input style="width: 30px; height: 20px;" type="text"/><input style="width: 30px; height: 20px;" type="text"/> 6(O01706)</p> <p>Other, <i>specify</i>: _____ 7(O01707) <input style="width: 30px; height: 20px;" type="text"/><input style="width: 30px; height: 20px;" type="text"/> 8(O01708)</p> <p>Don't know <input type="checkbox"/>9(O01709)</p>
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<p>18. In 2005, did you mix feed, other than minerals, to feed turkeys on your operation?</p> <p>Yes..... <input type="checkbox"/><sub>1(O01801)</sub></p> <p>→ Answer questions 19 to 22</p> <p>No ..... <input type="checkbox"/><sub>2(O01802)</sub> ↓ Go to question 23</p>	<p>19. What ingredients did you mix? (<i>Do not include commercial vitamin, mineral premixes or protein supplements</i>).</p> <p><i>Check all that apply.</i></p> <p>Corn ..... <input type="checkbox"/><sub>1(O01901)</sub></p> <p>Cereals (barley, wheat, rye, etc.) ... <input type="checkbox"/><sub>2(O01902)</sub></p> <p>Soybean meal ..... <input type="checkbox"/><sub>3(O01903)</sub></p> <p>Soybean grain ..... <input type="checkbox"/><sub>4(O01904)</sub></p> <p>Canola meal ..... <input type="checkbox"/><sub>5(O01905)</sub></p> <p>Other plant proteins (e.g., peas) .... <input type="checkbox"/><sub>6(O01906)</sub></p> <p>Animal proteins (<i>e.g. whey or skim milk powder</i>)  ..... <input type="checkbox"/><sub>7(O01907)</sub></p> <p>Other, <i>specify</i>: _____ <input type="checkbox"/><sub>8(O01908)</sub></p>
	<p>20. Which best describes how you formulated your turkey diet: ... ?</p> <p>Based on farm experience and records ..... <input type="checkbox"/><sub>1(O02001)</sub></p> <p>Following tag instructions ... <input type="checkbox"/><sub>2(O02002)</sub></p> <p>Following advice from nutritionist or veterinarian  ..... <input type="checkbox"/><sub>3(O02003)</sub></p> <p>Other, <i>specify</i>: _____ <input type="checkbox"/><sub>4(O02004)</sub></p>
	<p>21. How often were these ingredients analysed for protein content?</p> <p>Never ..... <input type="checkbox"/><sub>1(O02101)</sub></p> <p>On occasion, but not in 2005 ..... <input type="checkbox"/><sub>2(O02102)</sub></p> <p>One to four times in 2005 .. <input type="checkbox"/><sub>3(O02103)</sub></p> <p>Five times or more in 2005. .... <input type="checkbox"/><sub>4(O02104)</sub></p>
	<p>22. If the finished feed was analysed in 2005, was the crude protein content: ...?</p> <p>Usually under your target protein content ... <input type="checkbox"/><sub>1(O02201)</sub></p> <p>Usually meeting your target protein content. <input type="checkbox"/><sub>2(O02202)</sub></p> <p>Usually over your target protein content..... <input type="checkbox"/><sub>3(O02203)</sub></p>

23. For your turkeys in 2005, what was the feed conversion efficiency for your last completed cycle?  
(*The quantity of feed needed to produce 1 kg or 1 lb of turkey, live weight*).

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Feed conversion efficiency rate (lb or kg)<sub>1</sub> (O02301)

Or

Don't know <sub>2(O02302)</sub>

<p>24. In 2005, did you use litter in your turkey building(s)?</p> <p>Yes ..... <input type="checkbox"/><sub>1(O02401)</sub> → Answer questions 25 to 27</p> <p>No ..... <input type="checkbox"/><sub>2(O02402)</sub> ↓ Go to question 28</p>	<p>25. What type of litter did you use for your turkeys?</p> <p><i>Check all that apply.</i></p> <p>Straw or other crop residue ... <input type="checkbox"/><sub>1(O02501)</sub></p> <p>Sawdust, wood chips or shavings ..... <input type="checkbox"/><sub>2(O02502)</sub></p> <p>Paper crumb or other forest product .. <input type="checkbox"/><sub>3(O02503)</sub></p> <p>Other, <i>specify</i>: _____ <input type="checkbox"/><sub>4(O02504)</sub></p>
<p>26. How often did you add fresh litter for your turkeys? <i>Specify the usual number of days between one addition and the next.</i></p> <p style="text-align: center;"> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/>         Days<sub>1(O02601)</sub> </p>	
<p>27. Approximately how much bedding do you use per year for all your turkeys?</p> <p> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/>         Cubic yards/metres<sub>1(O02701)</sub> </p> <p>--Or--</p> <p> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/>         Number of large bales<sub>2(O02702)</sub> </p> <p>--Or--</p> <p> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/>         Number of small bales<sub>3(O02703)</sub> </p> <p>--Or--</p> <p> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/>         Tonnes (metric)<sub>4(O02704)</sub> </p> <p>--Or--</p> <p> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/>         Tons (imperial)<sub>5(O02705)</sub> </p> <p>--Or--</p> <p> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <sub>6(O02706)</sub> Other units         <p style="text-align: right;"><i>Specify units:</i> _____ <sub>7(O02707)</sub></p> </p> <p>Don't know <input type="checkbox"/><sub>8(O02708)</sub></p>	

28. What was the number of days, on average, between cleaning out manure from your turkey buildings?

Days<sub>1(O02801)</sub>

29. How many times per production cycle did you clean manure from your turkey building(s)?

- Partially cleaned several times every production cycle and fully cleaned once at the end..... <sub>1(O02901)</sub>
- Fully cleaned once every production cycle ..... <sub>2(O02902)</sub>
- Fully cleaned less often than once every production cycle..... <sub>3(O02903)</sub>
- Fully cleaned several times every production cycle..... <sub>4(O02904)</sub>

30. In 2005, what was the percentage (%) of all the manure removed from your turkey building(s) during the following months?

What percentage was removed in...?

	%			
April to May.....	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 30px; height: 20px;"></td> <td style="width: 30px; height: 20px;"></td> <td style="width: 30px; height: 20px;"></td> </tr> </table> 1(O03001)			
June to August .....	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 30px; height: 20px;"></td> <td style="width: 30px; height: 20px;"></td> <td style="width: 30px; height: 20px;"></td> </tr> </table> 2(O03002)			
September to November .....	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 30px; height: 20px;"></td> <td style="width: 30px; height: 20px;"></td> <td style="width: 30px; height: 20px;"></td> </tr> </table> 3(O03003)			
December to March .....	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 30px; height: 20px;"></td> <td style="width: 30px; height: 20px;"></td> <td style="width: 30px; height: 20px;"></td> </tr> </table> 4(O03004)			

**Total must be 100%**

-----Or-----

Manure is removed after each cycle .....  5(O03005)

## Section 2 – Solid Manure Handling and Storage

\*Please refer to a normal year\*

31. Do you store solid manure from your turkey operation?

Yes.....  1(O03101) ↓ Please complete Section 2

No .....  2(O03102) → Go to Section 3 (page 8)

32. How long do you usually store solid manure collected over **winter**? (*December to March*)

Is it stored ...?

Less than 1 month .....  1(O03201)

From 1 to less than 6 months ..  2(O03202)

From 6 to less than 12 months .....  3(O03203)

12 months or longer.....  4(O03204)

Not stored over winter. ....  5(O03205)

33. How long do you usually store solid manure collected from **spring to fall**? (*April to November*)

Is it stored ...?

Less than 1 month .....  1(O03301)

From 1 to less than 6 months ..  2(O03302)

From 6 to less than 12 months .....  3(O03303)

12 months or longer.....  4(O03304)

Not stored over spring to fall.....  5(O03305)

34. How do you usually store solid manure? Is it ...?

Uncovered outdoor piles or bunkers.....  1(O03401)

Piles or bunkers covered with tarp or straw.....  2(O03402)

Piles or bunkers under a roof ..  3(O03403)

Other storage, *specify*: \_\_\_\_\_  4(O03404)

<p>35. Do you put any <b>additives into the solid manure</b>, to modify odour, pH or nutrient retention? Exclude litter.</p> <p>Yes ..... <input type="checkbox"/><sub>1(O03501)</sub> → Answer question 36</p> <p>No ..... <input type="checkbox"/><sub>2(O03502)</sub> ↓ Go to question 37</p>	<p>36. What types of additives do you use? <i>Specify below:</i></p> <p>_____ 1(O03601)</p> <p>_____ 2(O03602)</p>
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37. How do you manage solid manure while it is in storage? Is it ...?
- Not moved or disturbed ..... <sub>1(O03701)</sub>
- Moved or disturbed once or twice  
(e.g. to consolidate a pile or make room for more manure from the barn) ..... <sub>2(O03702)</sub>
- Routinely and thoroughly mixed or turned  
(e.g. to accelerate composting) ..... <sub>3(O03703)</sub>

38. What is the percentage of solid manure disposed of through each method you use?  
*What percentage is ...?*

	%			
Spread on land (by you or someone else).....	<table border="1" style="width: 100%; height: 20px;"> <tr> <td style="width: 33%;"></td> <td style="width: 33%;"></td> <td style="width: 33%;"></td> </tr> </table>			
Composted (then spread on land).....	<table border="1" style="width: 100%; height: 20px;"> <tr> <td style="width: 33%;"></td> <td style="width: 33%;"></td> <td style="width: 33%;"></td> </tr> </table>			
Removed by contractor (don't know how it is used).....	<table border="1" style="width: 100%; height: 20px;"> <tr> <td style="width: 33%;"></td> <td style="width: 33%;"></td> <td style="width: 33%;"></td> </tr> </table>			
Other, Specify: _____	<table border="1" style="width: 100%; height: 20px;"> <tr> <td style="width: 33%;"></td> <td style="width: 33%;"></td> <td style="width: 33%;"></td> </tr> </table>			

**Total must be 100%**

### Section 3 – Land spreading of solid manure

\*Please refer to a normal year\*

39. Is solid manure from your *turkey operation* spread on land (spread on any land by the operator or by someone else)?
- Yes..... <sub>1(O03901)</sub> ↓ Please complete Section 3
- No ..... <sub>2(O03902)</sub> → Go to Section 4 (page 11)
40. When the manure is tilled into the soil, what amount would you estimate is still exposed to the air ...?
- Less than 25% (such as with moldboard plow) . ..... <sub>1(O04001)</sub>
- 25% to 50% (such as with disc or chisel plow).. ..... <sub>2(O04002)</sub>
- More than 50% (such as with harrow).. ..... <sub>3(O04003)</sub>

41. Of the total amount of solid manure from your *turkey operation* applied on land, what percentage is spread on ...?

	%			
Tilled crop land (most crop residue tilled into soil) .....	<table border="1" style="width: 100%; height: 20px;"> <tr> <td style="width: 33%;"></td> <td style="width: 33%;"></td> <td style="width: 33%;"></td> </tr> </table>			
Reduced till crop land (most crop residue retained on surface) .....	<table border="1" style="width: 100%; height: 20px;"> <tr> <td style="width: 33%;"></td> <td style="width: 33%;"></td> <td style="width: 33%;"></td> </tr> </table>			
Land covered with perennial or forage crops .....	<table border="1" style="width: 100%; height: 20px;"> <tr> <td style="width: 33%;"></td> <td style="width: 33%;"></td> <td style="width: 33%;"></td> </tr> </table>			
Other, Specify: _____	<table border="1" style="width: 100%; height: 20px;"> <tr> <td style="width: 33%;"></td> <td style="width: 33%;"></td> <td style="width: 33%;"></td> </tr> </table>			

**Total must be 100%**



If solid manure is applied on tilled crop land, answer questions 42 and 43. Else go to question 44.

<p>42. Of the total (<i>solid</i>) manure applied on tilled soil, what percentage is applied in each month?</p> <p>What percentage is usually applied in ...?</p> <p style="text-align: center;"><b>%</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr><td>January .....</td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td>1(O04201)</td></tr> <tr><td>February .....</td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td>2(O04202)</td></tr> <tr><td>March .....</td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td>3(O04203)</td></tr> <tr><td>April .....</td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td>4(O04204)</td></tr> <tr><td>May .....</td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td>5(O04205)</td></tr> <tr><td>June .....</td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td>6(O04206)</td></tr> <tr><td>July .....</td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td>7(O04207)</td></tr> <tr><td>August .....</td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td>8(O04208)</td></tr> <tr><td>September .....</td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td>9(O04209)</td></tr> <tr><td>October .....</td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td>10(O04210)</td></tr> <tr><td>November .....</td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td>11(O04211)</td></tr> <tr><td>December .....</td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td>12(O04212)</td></tr> </table> <p style="text-align: center;"><b>Total must be 100%</b></p> <p>All year round at regular intervals <input type="checkbox"/> 13(O04213)</p>	January .....				1(O04201)	February .....				2(O04202)	March .....				3(O04203)	April .....				4(O04204)	May .....				5(O04205)	June .....				6(O04206)	July .....				7(O04207)	August .....				8(O04208)	September .....				9(O04209)	October .....				10(O04210)	November .....				11(O04211)	December .....				12(O04212)	<p>43. For each period, how many days after spreading is manure incorporated (<i>tilled</i>) into soil? <b>If different for different fields, give the most common.</b> (Incorporated same day = 0 days).</p> <p style="text-align: center;"><b>Days</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr><td>January .....</td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td>1(O04301)</td></tr> <tr><td>February .....</td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td>2(O04302)</td></tr> <tr><td>March .....</td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td>3(O04303)</td></tr> <tr><td>April .....</td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td>4(O04304)</td></tr> <tr><td>May .....</td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td>5(O04305)</td></tr> <tr><td>June .....</td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td>6(O04306)</td></tr> <tr><td>July .....</td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td>7(O04307)</td></tr> <tr><td>August .....</td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td>8(O04308)</td></tr> <tr><td>September .....</td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td>9(O04309)</td></tr> <tr><td>October .....</td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td>10(O04310)</td></tr> <tr><td>November .....</td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td>11(O04311)</td></tr> <tr><td>December .....</td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td style="border: 1px solid black; width: 30px; height: 20px;"></td><td>12(O04312)</td></tr> </table> <p>Not applicable (<i>manure is not incorporated into soil</i>) <input type="checkbox"/> 13(O04313)</p>	January .....				1(O04301)	February .....				2(O04302)	March .....				3(O04303)	April .....				4(O04304)	May .....				5(O04305)	June .....				6(O04306)	July .....				7(O04307)	August .....				8(O04308)	September .....				9(O04309)	October .....				10(O04310)	November .....				11(O04311)	December .....				12(O04312)
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If solid manure is applied on reduced till, perennial or forage crop land, answer question 44.

Else go to question 45.

44. Of the total (*solid*) manure applied on reduced till crop land, perennial or forage crop land, what percentage is applied in each month?

	<b>%</b>	
January .....		1(O04401)
February .....		2(O04402)
March .....		3(O04403)
April .....		4(O04404)
May .....		5(O04405)
June .....		6(O04406)
July .....		7(O04407)
August .....		8(O04408)
September .....		9(O04409)
October .....		10(O04410)
November .....		11(O04411)
December .....		12(O04412)

**Total must be 100%**

All year round at regular intervals  1(O04413)

45. In the past 3 years, has a chemical analysis of the solid manure been done for levels of Nitrogen, Phosphorus, Potassium, micronutrient or moisture content?

Yes..... <sub>1(O04501)</sub> → Answer question 46

No ..... <sub>2(O04502)</sub> ↓ Go to question 47

46. What were the lab results? (**Specify units of measure and range** e.g., 45 to 53 kg Nitrogen per tonne or 0.45 to 0.53% nitrate Nitrogen).

**Unit of measure codes:**

1 = Kilograms (kg) per (metric) tonne of manure  
 2 = Pounds (lb) per (imperial) ton of manure  
 3 = Percentage

Enter range in first eight boxes and enter the decimal point if needed. Enter unit of measure in last box to right e.g.:

to

**Lab results (numbers) of chemical analysis:**

*Moisture content*     to      *Unit of measure*

1(O04601) 2(O04602) 3(O04603)

*Dry matter content*     to

4(O04604) 5(O04605) 6(O04606)

*Total Nitrogen (N)*     to

7(O04607) 8(O04608) 9(O04609)

*Ammonium (NH<sub>4</sub>)*     to

10(O04610) 11(O04611) 12(O04612)

*Phosphorus (P)*     to

13(O04613) 14(O04614) 15(O04615)

47. Do you usually land spread (*solid*) manure at a particular time of day?

Yes..... <sub>1(O04701)</sub>  
 → Answer question 48

No, it is spread whenever possible... <sub>2(O04702)</sub>  
 ↓Go to question 49

48. Is it usually spread between: ...?

10 a.m. and 6 p.m. .... <sub>1(O04801)</sub>

6 p.m. and 10 a.m. .... <sub>2(O04802)</sub>

49. Do you land spread manure when the wind speed is ...?

Calm, say below 5 km/hour (*a flag might hang or ripple gently at this wind speed*) ..... <sub>1(O04901)</sub>

Brisk or strong, say about 5 to 9 km/hour (*a flag would fly straight out at this wind speed*) ..... <sub>2(O04902)</sub>

Any speed, the job gets done whenever it is possible ..... <sub>3(O04903)</sub>

## Section 4 - Handling and storage of liquid manure

**\*Please refer to a normal year\***

50. Do you store liquid manure (slurry) from your turkey operation?

Yes..... <sub>1(O05001)</sub> ↓ Please complete Section 4

No ..... <sub>2(O05002)</sub> → Go to Section 5 (page 13)

51. How long do you usually store liquid manure collected over **winter**? (*December to March*)

Is it stored ...?

Less than 1 month ..... <sub>1(O05101)</sub>

From 1 to less than 6 months ..... <sub>2(O05102)</sub>

From 6 to less than 12 months ..... <sub>3(O05103)</sub>

12 months or longer..... <sub>4(O05104)</sub>

Not stored over winter. .... <sub>5(O05105)</sub>

52. How long do you usually store liquid manure collected from **spring to fall**? (*April to November*)

Is it stored ...?

Less than 1 month ..... <sub>1(O05201)</sub>

From 1 to less than 6 months .. <sub>2(O05202)</sub>

From 6 to less than 12 months ..... <sub>3(O05203)</sub>

12 months or longer..... <sub>4(O05204)</sub>

Not stored over spring to fall..... <sub>5(O05205)</sub>

<p>53. Do you separate solids from liquid manure (<i>slurry</i>)?</p> <p>Yes..... <input type="checkbox"/><sub>1(O05301)</sub> → Answer question 54</p> <p>No ..... <input type="checkbox"/><sub>2(O05302)</sub> ↓ Go to question 55</p> <p>Not applicable <input type="checkbox"/><sub>3(O05303)</sub> ↓ Go to question 55</p>	<p>54. What do you use to separate solids from liquid manure?</p> <p>Liquid drawn off top of tank ..... <input type="checkbox"/><sub>1(O05401)</sub></p> <p>Settling ponds or weeping walls ..... <input type="checkbox"/><sub>2(O05402)</sub></p> <p>Screens ..... <input type="checkbox"/><sub>3(O05403)</sub></p> <p>Presses (belt, screw or other ) ..... <input type="checkbox"/><sub>4(O05404)</sub></p> <p>Other, <i>specify</i>: _____ <input type="checkbox"/><sub>5(O05405)</sub></p>
---	---

55. Which of the following describes the main (*or largest*) liquid manure storage space you used?

Is it a ...?

Tank above ground..... <sub>1(O05501)</sub>

Lined or cement pit ..... <sub>2(O05502)</sub>

Lagoon or dugout in ground ..... <sub>3(O05503)</sub>

Other storage, *specify*: \_\_\_\_\_ <sub>4(O05504)</sub>

56. Is your main (*or largest*) liquid manure storage space ...?

Open, so rain might get in ..... <sub>1(O05601)</sub>

Covered with a roof..... <sub>2(O05602)</sub>

57. On your main (*or largest*) liquid manure storage, is there ...?

A floating crust formed by the manure.. ..... <sub>1(O05701)</sub>

A floating cover such as a floating lid or tarp .... <sub>2(O05702)</sub>

A floating cover such as straw ..... <sub>3(O05703)</sub>

No floating cover or crust..... <sub>4(O05704)</sub>

58. How do you usually manage liquid manure while it is in storage? *Is it ...?*
- Not aerated or agitated until just before taken out ..... <sub>1(O05801)</sub>
- Aerated or agitated up to three times per month ..... <sub>2(O05802)</sub>
- Aerated or agitated four times or more per month ..... <sub>3(O05803)</sub>

59. What becomes of liquid manure on your operation? *Is it ...?*  
*Check all that apply.*
- Spread on land (*by you or someone else*)..... <sub>1(O05901)</sub>
- Composted (*then spread on land*)..... <sub>2(O05902)</sub>
- Removed by contractor (*don't know how it is used*)..... <sub>3(O05903)</sub>
- Other, *specify*: \_\_\_\_\_ <sub>4(O05904)</sub>

60. What percentage of liquid manure (*from your turkey operation*) is disposed of through each method you use?  
*What percentage is ...?*

	%			
Spread on land ( <i>by you or someone else</i> ).....	<table border="1" style="width: 100px; height: 20px; margin: 0 auto;"> <tr> <td style="width: 33%;"></td> <td style="width: 33%;"></td> <td style="width: 33%;"></td> </tr> </table> <input type="checkbox"/> <sub>1(O06001)</sub>			
Removed by contractor ( <i>don't know how it is used</i> ).....	<table border="1" style="width: 100px; height: 20px; margin: 0 auto;"> <tr> <td style="width: 33%;"></td> <td style="width: 33%;"></td> <td style="width: 33%;"></td> </tr> </table> <input type="checkbox"/> <sub>2(O06002)</sub>			
Other, <i>specify</i> : _____	<table border="1" style="width: 100px; height: 20px; margin: 0 auto;"> <tr> <td style="width: 33%;"></td> <td style="width: 33%;"></td> <td style="width: 33%;"></td> </tr> </table> <input type="checkbox"/> <sub>3(O06003)</sub> <input type="checkbox"/> <sub>4(O06004)</sub>			

**Total must be 100%**

<p>61. Do you put any additives into the <u>liquid manure</u>, to modify odour, pH or nutrient retention?          Exclude litter.</p> <p>Yes ..... <input type="checkbox"/><sub>1(O06101)</sub> → Answer question 62</p> <p>No ..... <input type="checkbox"/><sub>2(O06102)</sub> ↓ Go to question 63</p>	<p>62. What types of additives do you use?  <i>Specify below:</i></p> <p>_____ <input type="checkbox"/><sub>1(O06201)</sub></p> <p>_____ <input type="checkbox"/><sub>2(O06202)</sub></p>
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63. What are the dimensions of the surface area of your main (*or largest*) liquid manure storage space ...?  
*(If oval give length and width. If round give diameter in Box 5 or 6).*

<table border="1" style="width: 100px; height: 20px;"> <tr> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> </tr> </table>					feet <sub>1(O06301)</sub>	by	<table border="1" style="width: 100px; height: 20px;"> <tr> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> </tr> </table>					feet <sub>2(O06302)</sub>	
-----Or-----													
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-----Or-----													
<b>(Box 5)</b>			<b>(Box 6)</b>										
<table border="1" style="width: 100px; height: 20px;"> <tr> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> </tr> </table>					diameter in feet <sub>5(O06305)</sub>			<table border="1" style="width: 100px; height: 20px;"> <tr> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> </tr> </table>					diameter in metres <sub>6(O06306)</sub>

64. What is the depth (*pit capacity*) of your main (*or largest*) liquid manure storage?

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**Section 5 – Land spreading of liquid manure (*slurry*)**

**\*Please refer to a normal year\***

65. Is liquid manure (*slurry*) from your turkey operation usually spread on land (*spread on any land by the operator or by someone else*)?

Yes..... <sub>1(O06501)</sub> ↓ Please complete Section 5

No ..... <sub>2(O06502)</sub> → Go to Section 6 (page 16)

66. Of the total liquid manure from your turkey operation applied on land, what percentage is spread on ...?

	%	
Tilled crop land ( <i>most crop residue tilled into soil</i> ) .....	<input type="text"/> <input type="text"/> <input type="text"/>	1(O06601) → Answer questions 67 and 68
Reduced till crop land ( <i>most crop residue retained on surface</i> ) .....	<input type="text"/> <input type="text"/> <input type="text"/>	2(O06602) → Answer question 69
Land covered with perennial crops or forage crops .....	<input type="text"/> <input type="text"/> <input type="text"/>	3(O06603) → Answer question 69
Other, <i>specify</i> : _____	<input type="text"/> <input type="text"/> <input type="text"/>	4(O06604) 5(O06605) → Go to question 70
<b>Total must be 100%</b>		

**\*\*If applied on tilled land answer questions 67 and 68. Else go to question 69. \*\***

<p>67. Of the total (<i>liquid</i>) manure applied on tilled soil, what percentage is usually applied in each month?</p> <p><i>What percentage is applied in ...?</i></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;"></th> <th style="width: 10%; text-align: center;">%</th> <th style="width: 10%;"></th> </tr> </thead> <tbody> <tr><td>January .....</td><td style="text-align: center;"><input type="text"/><input type="text"/><input type="text"/></td><td style="text-align: right;">1(O06701)</td></tr> <tr><td>February .....</td><td style="text-align: center;"><input type="text"/><input type="text"/><input type="text"/></td><td style="text-align: right;">2(O06702)</td></tr> <tr><td>March .....</td><td style="text-align: center;"><input type="text"/><input type="text"/><input type="text"/></td><td style="text-align: right;">3(O06703)</td></tr> <tr><td>April .....</td><td style="text-align: center;"><input type="text"/><input type="text"/><input type="text"/></td><td style="text-align: right;">4(O06704)</td></tr> <tr><td>May .....</td><td style="text-align: center;"><input type="text"/><input type="text"/><input type="text"/></td><td style="text-align: right;">5(O06705)</td></tr> <tr><td>June .....</td><td style="text-align: center;"><input type="text"/><input type="text"/><input type="text"/></td><td style="text-align: right;">6(O06706)</td></tr> <tr><td>July .....</td><td style="text-align: center;"><input type="text"/><input type="text"/><input type="text"/></td><td style="text-align: right;">7(O06707)</td></tr> <tr><td>August .....</td><td style="text-align: center;"><input type="text"/><input type="text"/><input type="text"/></td><td style="text-align: right;">8(O06708)</td></tr> <tr><td>September .....</td><td style="text-align: center;"><input type="text"/><input type="text"/><input type="text"/></td><td style="text-align: right;">9(O06709)</td></tr> <tr><td>October .....</td><td style="text-align: center;"><input type="text"/><input type="text"/><input type="text"/></td><td style="text-align: right;">10(O06710)</td></tr> <tr><td>November .....</td><td style="text-align: center;"><input type="text"/><input type="text"/><input type="text"/></td><td style="text-align: right;">11(O06711)</td></tr> <tr><td>December .....</td><td style="text-align: center;"><input type="text"/><input type="text"/><input type="text"/></td><td style="text-align: right;">12(O06712)</td></tr> <tr> <td colspan="3" style="text-align: center;"><b>Total must be 100%</b></td> </tr> <tr> <td colspan="3">All year round at regular intervals <input type="checkbox"/> <sub>13(O06713)</sub></td> </tr> </tbody> </table>		%		January .....	<input type="text"/> <input type="text"/> <input type="text"/>	1(O06701)	February .....	<input type="text"/> <input type="text"/> <input type="text"/>	2(O06702)	March .....	<input type="text"/> <input type="text"/> <input type="text"/>	3(O06703)	April .....	<input type="text"/> <input type="text"/> <input type="text"/>	4(O06704)	May .....	<input type="text"/> <input type="text"/> <input type="text"/>	5(O06705)	June .....	<input type="text"/> <input type="text"/> <input type="text"/>	6(O06706)	July .....	<input type="text"/> <input type="text"/> <input type="text"/>	7(O06707)	August .....	<input type="text"/> <input type="text"/> <input type="text"/>	8(O06708)	September .....	<input type="text"/> <input type="text"/> <input type="text"/>	9(O06709)	October .....	<input type="text"/> <input type="text"/> <input type="text"/>	10(O06710)	November .....	<input type="text"/> <input type="text"/> <input type="text"/>	11(O06711)	December .....	<input type="text"/> <input type="text"/> <input type="text"/>	12(O06712)	<b>Total must be 100%</b>			All year round at regular intervals <input type="checkbox"/> <sub>13(O06713)</sub>			<p>68. For each period, how many days after spreading is the manure incorporated (<i>tilled</i>) into soil? <b>If different for different fields, give the most common.</b> (Less than 2 hours = 0 days. From 2 to 24 hours = 0.5 days).</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;"></th> <th style="width: 10%;"></th> <th style="width: 10%; text-align: center;">Days</th> </tr> </thead> <tbody> <tr><td>January .....</td><td style="text-align: center;"><input type="text"/><input type="text"/><input type="text"/></td><td style="text-align: right;">1(O06801)</td></tr> <tr><td>February .....</td><td style="text-align: center;"><input type="text"/><input type="text"/><input type="text"/></td><td style="text-align: right;">2(O06802)</td></tr> <tr><td>March .....</td><td style="text-align: center;"><input type="text"/><input type="text"/><input type="text"/></td><td style="text-align: right;">3(O06803)</td></tr> <tr><td>April .....</td><td style="text-align: center;"><input type="text"/><input type="text"/><input type="text"/></td><td style="text-align: right;">4(O06804)</td></tr> <tr><td>May .....</td><td style="text-align: center;"><input type="text"/><input type="text"/><input type="text"/></td><td style="text-align: right;">5(O06805)</td></tr> <tr><td>June .....</td><td style="text-align: center;"><input type="text"/><input type="text"/><input type="text"/></td><td style="text-align: right;">6(O06806)</td></tr> <tr><td>July .....</td><td style="text-align: center;"><input type="text"/><input type="text"/><input type="text"/></td><td style="text-align: right;">7(O06807)</td></tr> <tr><td>August .....</td><td style="text-align: center;"><input type="text"/><input type="text"/><input type="text"/></td><td style="text-align: right;">8(O06808)</td></tr> <tr><td>September .....</td><td style="text-align: center;"><input type="text"/><input type="text"/><input type="text"/></td><td style="text-align: right;">9(O06809)</td></tr> <tr><td>October .....</td><td style="text-align: center;"><input type="text"/><input type="text"/><input type="text"/></td><td style="text-align: right;">10(O06810)</td></tr> <tr><td>November .....</td><td style="text-align: center;"><input type="text"/><input type="text"/><input type="text"/></td><td style="text-align: right;">11(O06811)</td></tr> <tr><td>December .....</td><td style="text-align: center;"><input type="text"/><input type="text"/><input type="text"/></td><td style="text-align: right;">12(O06812)</td></tr> <tr> <td colspan="3">Not applicable (<i>manure is not incorporated into soil</i>) <input type="checkbox"/> <sub>13(O06813)</sub></td> </tr> </tbody> </table>			Days	January .....	<input type="text"/> <input type="text"/> <input type="text"/>	1(O06801)	February .....	<input type="text"/> <input type="text"/> <input type="text"/>	2(O06802)	March .....	<input type="text"/> <input type="text"/> <input type="text"/>	3(O06803)	April .....	<input type="text"/> <input type="text"/> <input type="text"/>	4(O06804)	May .....	<input type="text"/> <input type="text"/> <input type="text"/>	5(O06805)	June .....	<input type="text"/> <input type="text"/> <input type="text"/>	6(O06806)	July .....	<input type="text"/> <input type="text"/> <input type="text"/>	7(O06807)	August .....	<input type="text"/> <input type="text"/> <input type="text"/>	8(O06808)	September .....	<input type="text"/> <input type="text"/> <input type="text"/>	9(O06809)	October .....	<input type="text"/> <input type="text"/> <input type="text"/>	10(O06810)	November .....	<input type="text"/> <input type="text"/> <input type="text"/>	11(O06811)	December .....	<input type="text"/> <input type="text"/> <input type="text"/>	12(O06812)	Not applicable ( <i>manure is not incorporated into soil</i> ) <input type="checkbox"/> <sub>13(O06813)</sub>		
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**\*\*If applied on reduced till or perennial crop land, answer question 69. Else go to question 70\*\***

69. Of the total liquid manure applied on reduced till or perennial crop land, what percentage is applied in each month:

	%				
January .....	<table border="1" style="display: inline-table; width: 60px; height: 20px;"><tr><td> </td><td> </td><td> </td></tr></table>				1(O06901)
February .....	<table border="1" style="display: inline-table; width: 60px; height: 20px;"><tr><td> </td><td> </td><td> </td></tr></table>				2(O06902)
March .....	<table border="1" style="display: inline-table; width: 60px; height: 20px;"><tr><td> </td><td> </td><td> </td></tr></table>				3(O06903)
April .....	<table border="1" style="display: inline-table; width: 60px; height: 20px;"><tr><td> </td><td> </td><td> </td></tr></table>				4(O06904)
May .....	<table border="1" style="display: inline-table; width: 60px; height: 20px;"><tr><td> </td><td> </td><td> </td></tr></table>				5(O06905)
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July .....	<table border="1" style="display: inline-table; width: 60px; height: 20px;"><tr><td> </td><td> </td><td> </td></tr></table>				7(O06907)
August .....	<table border="1" style="display: inline-table; width: 60px; height: 20px;"><tr><td> </td><td> </td><td> </td></tr></table>				8(O06908)
September .....	<table border="1" style="display: inline-table; width: 60px; height: 20px;"><tr><td> </td><td> </td><td> </td></tr></table>				9(O06909)
October .....	<table border="1" style="display: inline-table; width: 60px; height: 20px;"><tr><td> </td><td> </td><td> </td></tr></table>				10(O06910)
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All year round at regular intervals <input type="checkbox"/>		13(O06913)			

**Total must be 100%**

<p>70. Do you usually land spread (<i>liquid</i>) manure at a particular time of day?</p> <p>Yes..... <input type="checkbox"/> 1(O07001)</p> <p>→ Answer question 71</p> <p>No, manure is spread whenever possible ... <input type="checkbox"/> 2(O07002)</p> <p>↓ Go to question 72</p>	<p>71. Is it usually spread between: ...?</p> <p>10 a.m. and 6 p.m. .... <input type="checkbox"/> 1(O07101)</p> <p>6 p.m. and 10a.m. .... <input type="checkbox"/> 2(O07102)</p>
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72. What best describes the consistency of the liquid manure on your operation?

Runny like water .....  1(O07201)

Pea soup.....  2(O07202)

Toothpaste.....  3(O07203)

73. *What method do you usually use to spread liquid manure? Give the approximate percentage of total liquid manure spread by each method.*

*What percentage is ...?*

	%				
Broadcast over soil surface, over stubble or residue .....	<table border="1" style="display: inline-table; width: 60px; height: 20px;"><tr><td> </td><td> </td><td> </td></tr></table>				1(O07301)
Narrow bands on soil surface such as with drop hoses or a sleighfoot .....	<table border="1" style="display: inline-table; width: 60px; height: 20px;"><tr><td> </td><td> </td><td> </td></tr></table>				2(O07302)
Shallow injected, where some of the manure remains on the soil surface .....	<table border="1" style="display: inline-table; width: 60px; height: 20px;"><tr><td> </td><td> </td><td> </td></tr></table>				3(O07303)
Deep injected, where little of the manure remains on the soil surface .....	<table border="1" style="display: inline-table; width: 60px; height: 20px;"><tr><td> </td><td> </td><td> </td></tr></table>				4(O07304)
Irrigated (e.g. with a pivot gun) .....	<table border="1" style="display: inline-table; width: 60px; height: 20px;"><tr><td> </td><td> </td><td> </td></tr></table>				5(O07305)
Other, <i>specify</i> : _____	<table border="1" style="display: inline-table; width: 60px; height: 20px;"><tr><td> </td><td> </td><td> </td></tr></table>				6(O07306) 7(O07307)

**Total must be 100%**

<p>74. Does the method you use to spread <u>liquid manure</u> change from season to season?</p> <p>Yes ..... <input type="checkbox"/><sub>1(O07401)</sub> → Answer question 75</p> <p>No, same method used all year <input type="checkbox"/><sub>2(O07402)</sub></p> <p>↓ Go to question 76</p>	<p>75. Do you usually ...?</p> <p>Inject in spring or fall, broadcast in summer.. <input type="checkbox"/><sub>1(O07501)</sub></p> <p>Other, <i>specify</i>: _____ <input type="checkbox"/><sub>2(O07502)</sub></p>
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76. Do you usually land spread (*liquid*) manure when wind speed is ...?
- Calm, say below 5 km/hour (*a flag might hang or ripple gently at this wind speed*) ..... <sub>1(O07601)</sub>
- Brisk or strong, say about 5 to 9 km/hour (*a flag would fly straight out at this wind speed*). ..... <sub>2(O07602)</sub>
- Any speed, the job gets done whenever it is possible ..... <sub>3(O07603)</sub>

<p>77. <u>In the past 3 years</u>, has a chemical analysis of the liquid manure been done for levels of Nitrogen, Phosphorus, Potassium, micronutrient or moisture content?</p> <p>Yes..... <input type="checkbox"/><sub>1(O07701)</sub> → Answer question 78</p> <p>No ..... <input type="checkbox"/><sub>2(O07702)</sub> ↓ Go to question 79</p>	<p>78. What were the lab results? (<b>Specify units of measure and range</b> e.g., 45 to 53 kg Nitrogen per tonne or 0.45 to 0.53% nitrate Nitrogen).</p> <p><b>Unit of measure codes:</b></p> <p>1 = Kilograms (kg) per (metric) tonne of manure  2 = Pounds (lb) per (imperial) ton of manure  3 = Percentage</p> <p>Enter range in first eight boxes and enter the decimal point if needed. Enter unit of measure in last box to right e.g.:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; width: 20px; text-align: center;">0</td> <td style="border: 1px solid black; width: 20px; text-align: center;">.</td> <td style="border: 1px solid black; width: 20px; text-align: center;">4</td> <td style="border: 1px solid black; width: 20px; text-align: center;">5</td> <td style="width: 20px;">to</td> <td style="border: 1px solid black; width: 20px; text-align: center;">0</td> <td style="border: 1px solid black; width: 20px; text-align: center;">.</td> <td style="border: 1px solid black; width: 20px; text-align: center;">5</td> <td style="border: 1px solid black; width: 20px; text-align: center;">3</td> <td style="border: 1px solid black; width: 20px; text-align: center;">3</td> </tr> </table> <p><b>Lab results (numbers) of chemical analysis:</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;"><i>Moisture content</i></td> <td style="text-align: center;"><i>Unit of measure</i></td> </tr> <tr> <td style="border: 1px solid black; width: 40px; height: 20px;"></td> <td style="border: 1px solid black; width: 40px; height: 20px;"></td> </tr> <tr> <td style="text-align: center;">1(O07801)</td> <td style="text-align: center;">2(O07802)</td> </tr> <tr> <td style="border: 1px solid black; width: 40px; height: 20px;"></td> <td style="border: 1px solid black; width: 40px; height: 20px;"></td> </tr> <tr> <td style="text-align: center;">3(O07803)</td> <td></td> </tr> <tr> <td style="text-align: center;"><i>Dry matter content</i></td> <td></td> </tr> <tr> <td style="border: 1px solid black; width: 40px; height: 20px;"></td> <td style="border: 1px solid black; width: 40px; height: 20px;"></td> </tr> <tr> <td style="text-align: center;">4(O07804)</td> <td style="text-align: center;">5(O07805)</td> </tr> <tr> <td style="border: 1px solid black; width: 40px; height: 20px;"></td> <td style="border: 1px solid black; width: 40px; height: 20px;"></td> </tr> <tr> <td style="text-align: center;">6(O07806)</td> <td></td> </tr> <tr> <td style="text-align: center;"><i>Total Nitrogen (N)</i></td> <td></td> </tr> <tr> <td style="border: 1px solid black; width: 40px; height: 20px;"></td> <td style="border: 1px solid black; width: 40px; height: 20px;"></td> </tr> <tr> <td style="text-align: center;">7(O07807)</td> <td style="text-align: center;">8(O07808)</td> </tr> <tr> <td style="border: 1px solid black; width: 40px; height: 20px;"></td> <td style="border: 1px solid black; width: 40px; height: 20px;"></td> </tr> <tr> <td style="text-align: center;">9(O07809)</td> <td></td> </tr> <tr> <td style="text-align: center;"><i>Ammonium (NH<sub>4</sub>)</i></td> <td></td> </tr> <tr> <td style="border: 1px solid black; width: 40px; height: 20px;"></td> <td style="border: 1px solid black; width: 40px; height: 20px;"></td> </tr> <tr> <td style="text-align: center;">10(O07810)</td> <td style="text-align: center;">11(O07811)</td> </tr> <tr> <td style="border: 1px solid black; width: 40px; height: 20px;"></td> <td style="border: 1px solid black; width: 40px; height: 20px;"></td> </tr> <tr> <td style="text-align: center;">12(O07812)</td> <td></td> </tr> <tr> <td style="text-align: center;"><i>Phosphorus (P)</i></td> <td></td> </tr> <tr> <td style="border: 1px solid black; width: 40px; height: 20px;"></td> <td style="border: 1px solid black; width: 40px; height: 20px;"></td> </tr> <tr> <td style="text-align: center;">13(O07813)</td> <td style="text-align: center;">14(O07814)</td> </tr> <tr> <td style="border: 1px solid black; width: 40px; height: 20px;"></td> <td style="border: 1px solid black; width: 40px; height: 20px;"></td> </tr> <tr> <td style="text-align: center;">15(O07815)</td> <td></td> </tr> </table>	0	.	4	5	to	0	.	5	3	3	<i>Moisture content</i>	<i>Unit of measure</i>			1(O07801)	2(O07802)			3(O07803)		<i>Dry matter content</i>				4(O07804)	5(O07805)			6(O07806)		<i>Total Nitrogen (N)</i>				7(O07807)	8(O07808)			9(O07809)		<i>Ammonium (NH<sub>4</sub>)</i>				10(O07810)	11(O07811)			12(O07812)		<i>Phosphorus (P)</i>				13(O07813)	14(O07814)			15(O07815)	
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**Section 6 - Odour management and nutrient conservation**

**\*Please refer to a normal year\***

79. At what stage of your turkey operation's cycle, if any, is the odour of manure stronger than it is **usually**?

Check all that apply.

Is it more often stronger during ...?

- Barn cleaning .....  1(O07901)
- Land spreading .....  2(O07902)
- Agitation of manure .....  3(O07903)
- Mixing or composting .....  4(O07904)
- Other, specify: \_\_\_\_\_ 5(O07905)
- No differences throughout the year .....  6(O07906)

**If no differences in odour throughout the year, go to question 82.**

80. How many times per year is the odour of manure from your (*turkey*) operation stronger than it is usually?

Time(s)<sub>1(O08001)</sub>

81. Usually, how many days per year does this stronger odour of manure last?

Day(s)<sub>1(O08101)</sub>

82. What is the vegetation within 300 metres (*1000 feet*) to the **north and west** of your barns?

Check all that apply.

- Nothing tall, there are no trees or tall shrubs (nothing taller than corn, for example) .....  1(O08201)
- Shelterbelt with leafed trees that shed leaves in fall .....  2(O08202)
- Shelterbelt with evergreen trees .....  3(O08203)
- Woodlot or forest .....  4(O08204)

83. What is the vegetation within 300 metres (*1000 feet*) to the **south and east** of your barns?

Check all that apply.

- Nothing tall, there are no trees or tall shrubs (nothing taller than corn, for example) .....  1(O08301)
- Shelterbelt with leafed trees that shed leaves in fall .....  2(O08302)
- Shelterbelt with evergreen trees .....  3(O08303)
- Woodlot or forest .....  4(O08304)

**Agreement to share data**

Thank you for taking the time to participate in our survey. In order to avoid duplication, Statistics Canada has entered into a data sharing agreement under Section 12 of the Statistics Act with Agriculture and Agri-Food Canada to share responses from this survey. The Department will not be given your name, address or other identifiers and is required to keep the information confidential and use it only for statistical and research purposes.

84. Do you agree to share this information with Agriculture and Agri-Food Canada?

Yes .....  1(O08401)

No .....  2(O08402)



