

## Supplementary information

**Table S1. Concentration of bacteria *E. Coli* in active sampling in LPR feedlot pens on 20th February 2020.** Sampling site, local time (H, HH:MM), Pump output (Q, L/min), sampling period (t, min), sampling volume (V, m<sup>3</sup>), count (R, CFU (colony forming units)), count of *E. coli* per m<sup>3</sup> of air (R, CFU/m<sup>3</sup>).

ID	A1	A2	A3	A4	A5	A6	A7
<b>Sampling site</b>	M2	M1	M3	M4	M5	M6	M8
<b>H</b>	11:40	11:46	12:01	12:26	12:35	12:55	13:26
<b>Q (L/min)</b>	30	30	30	30	30	30	30
<b>t (min)</b>	1	1	1	10	1	1	1
<b>V (m<sup>3</sup>)</b>	0.03	0.03	0.03	0.3	0.03	0.03	0.03
<b>R (CFU)</b>	0	37	39	Very high	22	89	2
<b>R (CFU/ m<sup>3</sup>)</b>	0	1233	1300	Very high	733	2967	67

**Table S2. Concentration of *E. coli* in active sampling around LPR feedlot pens on 20th February 2020.** Sampling site, local time (H, HH:MM), Pump output (Q, L/min), sampling period (t, min), sampling volume (V, m<sup>3</sup>), *E. coli* colonies number (N, CFU (colony forming units)), *E. coli* concentration (C, CFU/m<sup>3</sup>), w/c: saturated Petri dishes without count.

ID	A8	A9	A10	A11	A12	A13
<b>Sampling site</b>	M9	M10	M12	M13	M14	M15
<b>H</b>	13:35	13:45	13:55	14:05	14:15	14:26
<b>Q (L/min)</b>	30	30	30	30	30	30
<b>t (min)</b>	1	3	3	3	5	10
<b>V (m<sup>3</sup>)</b>	0.3	0.90	0.9	0.9	0.15	0.3
<b>N (CFU)</b>	w/c	10	3	w/c	3	w/c
<b>C (CFU / m<sup>3</sup>)</b>	w/c	111	33	w/c	20	w/c

**Table S3. Concentration of *E. coli* in active sampling in LPR feedlot pens on 5th April 2022.** Sampling site, local time (H, hh:mm), Pump output (Q, L/min), **no/ r: without count**, sampling period (t, min), sampling volume (V, m<sup>3</sup>), *E. coli* colonies number (N, CFU (colony forming units)), *E. coli* concentration (C, CFU/m<sup>3</sup>). w/c: saturated Petri dishes without count.

ID	A2	A18	A16	A15	A14	A21	A22	A23	A24
<b>Sampling site</b>	M7	M5	M2	M1	M20	M21	M16	M23	M23
<b>H</b>	12:05	12:23	12:35	12:45	12:53	13:03	13:15	13:45	14:08
<b>Q (l/min)</b>	30	30	30	30	30	30	30	30	30
<b>t (min)</b>	1	1	1	1.06	1	3	3	3	10
<b>V (m<sup>3</sup>)</b>	0.03	0.03	0.03	0.0318	0.03	0.09	0.09	0.09	0.3
<b>N (CFU)</b>	w/c	1	0	0	0	1	0	0	0
<b>C (CFU/ m<sup>3</sup>)</b>	w/c	33	0	0	0	11	0	0	0

**Table S4. Deposition of bacteria *E. Coli* in passive sampling in LPR feedlot pens on 5th April 2022.** Sampling site, sampling period (t, min), *E. coli* colonies number (N, CFU (colony forming units)), *E. coli* deposition rate (DR, CFU/m<sup>2</sup> s) w/c: saturated Petri dishes without count.

ID	P6	P7	P8	P9	P10	P11	P12
<b>Sampling site</b>	M11	M5	M5	M2	M2	M1	M1
<b>t (min)</b>	30	10	30	10	30	10	30
<b>C (CFU)</b>	12	6	15	1	w/c	1	3
<b>DR (CFU/m<sup>2</sup> s)</b>	2.096	3.144	2.620	0.524	w/c	0.524	0.524

**Table S5. Deposition of *E. coli* in the passive sampling around the LPR feedlot pens on 5th April 2022.** Sampling site, sampling period (t, min), *E. coli* colonies number (N, CFU (colony forming units)), *E. coli* deposition rate (DR, CFU/m<sup>2</sup> s), w/c: saturated Petri dishes without count.

<b>ID</b>	<b>P13</b>	<b>P14</b>	<b>P15</b>	<b>P16</b>	<b>P17</b>	<b>P18</b>	<b>P19</b>	<b>P20</b>	<b>P21</b>
<b>Sampling site</b>	M21	M21	M20	M20	M17	M17	M18	M19	M21
<b>t (min)</b>	10	30	10	30	10	30	30	30	30
<b>C (CFU)</b>	1	w/c	w/c	9	w/c	4	2	1	3
<b>DR (CFU/m<sup>2</sup> s)</b>	0.524	w/c	w/c	1.572	w/c	0.699	0.349	0.175	0.524