Appendix 1: On-Farm Composting Survey Instrument

WSARE Composting and Water Quality Project

Farm Survey Interview Questionnaire

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Farm name |  | | | |
| Contact Person |  | | | |
| Contact Details (tel., email, etc.) |  | | | |
| Interview Date |  | Interview method: | Telephone | In-person |

OSU Extension is working with agricultural composters, the DEQ and ODA to help protect water quality at small and mid-sized agricultural composting facilities while promoting on-farm composting. The results of this survey will be used to increase our understanding of on-farm composting so that DEQ can implement the composting Rules with sensitivity to the practicalities of on-farm composting. The survey will improve our understanding of the benefits of agricultural composting in Oregon, and the challenges and limitations faced by agricultural composters. It will also inform future research and Extension activities.

Your responses to this questionnaire are voluntary and confidential and will only be used for the purposes of this project. They will be reported anonymously and no information about your identity, your farm, or your composting activities will be shared with regulators without your express permission. Survey findings will be available on the OSU Small Farms website in 2013. If you have questions about this survey, contact Nick Andrews at 503-678-1264 extension 149. If you have questions about your rights under this survey, contact the office of Sponsored Programs and Research Compliance, Human Protections Administrator, Oregon State University 312 Kerr Administration Building Corvallis OR 97331; [irb@oregonstate.edu](mailto:irb@oregonstate.edu); or 541-737-3437.

Please answer all the questions you can. If there are questions you cannot answer, please skip them and move on to the next question.

Let’s start with a few questions about your farm:

1. What are the principal crops you grow? (Accept the five principal crops or categories)

|  |  |  |
| --- | --- | --- |
| Crops | Acres |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

1. What are the principal animal products the farm produces? (accept five)

|  |  |  |
| --- | --- | --- |
| Species | Number | Products |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

1. How many acres are pasture, fallow, or idle? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

WHY DO YOU COMPOST? Let’s talk about some of the reasons that you compost on your farm. For each of these items, please tell me whether it is a primary reason, a second-level, or not a reason why you’re composting.

1. To produce a soil amendment for field application:
   1. Primary reason
   2. Secondary reason
   3. Not a reason

Comments:

1. To improve soil health and organic matter content:
   1. Primary reason
   2. Secondary reason
   3. Not a reason

Comments:

1. To manage a waste product:
   1. Primary reason
   2. Secondary reason
   3. Not a reason

Comments:

1. To produce potting media:
   1. Primary reason
   2. Secondary reason
   3. Not a reason

Comments:

1. To earn an income from tipping fees:
   1. Primary reason
   2. Secondary reason
   3. Not a reason

Comments:

1. To earn an income from compost sales
2. Primary reason
3. Secondary reason
4. Not a reason

Comments:

1. To create livestock bedding:
2. Primary reason
3. Secondary reason
4. Not a reason

Comments:

1. Other, please specify:
2. Primary reason
3. Secondary reason
4. Not a reason

Comments:

1. How long have you been composting:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ years
2. Why do you compost instead of applying raw feedstock? Mark all that apply.
3. Improve spreadability.
4. Human pathogen management.
5. Weed seed management.
6. Plant pathogen management
7. Prevent nitrogen immobilization
8. Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. If you didn’t compost, what would you do with your farm waste?
10. Incorporate into the soil.
11. Burn.
12. Let it lay.
13. Other:
14. Why do you compost instead of buying compost?
15. To have control over feedstocks,
16. Quality assurance,
17. Cost of buying compost,
18. Other:
19. What are the main benefits you see from using compost? (Here, we’re looking for good quotes for the final report.)

COMPOSTING SITE:

1. Are you required to have a DEQ permit? All operations that compost 100 or more tons of feedstock per year or more than 2 tons per year of animal carcasses or meat waste must submit screening information to DEQ.
2. Yes – DEQ
3. Yes – ODA CAFO
4. No – skip to question # 19
5. Would you like contact information for a DEQ preliminary screening for ground water risk?
6. No
7. Yes. If “yes” offer Bill Mason’s contact information handout.
8. Is your composting site permanent or temporary?
9. Permanent (If permanent, skip to #21).
10. Temporary
11. If temporary, how long is it in one place?

Time in months or years: \_\_\_\_\_\_\_\_\_\_

1. Do you compost seasonally or year-round?
2. Seasonally
3. Year round
4. Do you grade your composting area or use any sort of pad?
5. No
6. Yes

Now, let’s talk about composting activities and water quality.

1. How do you manage leachate that forms?
2. Reincorporate it into the pile,
3. Divert it to a collection pond,
4. Let it infiltrate,
5. Divert to keep out of water,
6. Grade the site to direct flow,
7. Other:
8. How do you prevent leachate from forming?
9. Cover piles with tarp during wet weather
10. Compost under a roof
11. Manage moisture content when building and managing piles
12. Don’t compost during wet weather
13. Don’t store mature compost during wet weather
14. Pile shape
15. Other
16. How do you protect surface water from leachate at your site?
17. You don’t observe any significant leachate
18. Compost site is a long way from surface water – how far?
19. Compost site drains away from surface water
20. Filter strips between the compost site and surface water
21. Filter bags or straw bales between compost site and surface water
22. Berms between compost site and surface water
23. Bioswale
24. Other
25. How do you protect ground water from leachate at your site?
26. You don’t observe any significant leachate
27. Ground water is very deep. How deep?
28. Ground water is protected by a confining clay layer in the soil.
29. Bioswale
30. Compost pad
31. Other
32. Please tell me about the types of activities, the surfaces you use for those activities, and the times of year for your composting facility.

|  |  |  |
| --- | --- | --- |
| Activity | Type of Surface | Season of the Year |
| Incoming feedstock (describe if not all feedstock treated the same) |  |  |
| Building compost piles |  |  |
| Active composting |  |  |
| Curing area |  |  |
| Storage area |  |  |

1. Please tell me about the types of activities, the types of covers, and the seasons when you use covers.

|  |  |  |
| --- | --- | --- |
| Activity | Type of Cover | Season when covered. |
| Incoming feedstock (describe if not all feedstock treated the same) |  |  |
| Active composting |  |  |
| Curing area |  |  |
| Storage area |  |  |

1. feedstock: I’d like to ask a few questions about the feedstocks you compost.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Feedstock | Amount | | | When collected | Source  on-farm | Source off-farm |
| Approx % | Approx yd3/yr | Approx  tons / yr |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

Use whichever units (%, yards or tons) allow you to easily provide reasonably accurate estimates. Please provide total volume or weight of feedstock if using % for individual feedstock.

Comments about feedstock:

1. How much finished compost do you produce per year (yd3)?
2. How do you determine the composting recipe(s) you use?
3. Feedstock you have on-farm
4. Availability of feedstock to supplement what you have on-farm
5. Moisture content
6. C/N ratio
7. WSU compost calculator

COMPOST OPERATION:

1. Which composting methods do you use?
2. Loader-turned piles
3. Loader and manure-spreader turned piles
4. Windrow-turned piles
5. Aerated piles
6. I stack the feedstocks and let them process without additional management.
7. How long do you actively manage compost before you begin the curing or storage stages?
8. How long do you cure compost?
9. Do you store finished (cured) compost?
10. What time of year do you apply compost?

Now I’d like to ask some questions about your perceptions of the regulatory process. In these items, please indicate how strongly you agree or disagree with the statement.

1. If I had to grade my composting site I would stop composting:
2. Strongly disagree
3. Disagree
4. Neither agree nor disagree
5. Agree
6. Strongly agree

Comments:

1. If I had to install a compost pad and leachate collection pond I would stop composting:
2. Strongly disagree
3. Disagree
4. Neither agree nor disagree
5. Agree
6. Strongly agree

Comments:

1. If I were required to use tarps I would stop composting:
2. Strongly disagree
3. Disagree
4. Neither agree nor disagree
5. Agree
6. Strongly agree

Comments:

1. If I were required to install a roof over part of the composting area I would stop composting:
2. Strongly disagree
3. Disagree
4. Neither agree nor disagree
5. Agree
6. Strongly agree

Comments:

1. I am interested in expanding my composting activities:
2. Strongly disagree
3. Disagree
4. Neither agree nor disagree
5. Agree
6. Strongly agree

Comments:

1. Do you have any comments or concerns about the DEQ regulatory process?

Now, I’d like to ask some general questions about your concerns about your composting operation:

1. What are the three greatest expenses associated with your compost operation?
2. diesel
3. labor
4. machinery to process, loaders, turners
5. machinery to spread
6. plastic, tarps
7. handling the same
8. construction costs, buildings
9. feedstock
10. other \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
11. What challenges do you face with your composting operation?
12. Where do you go for composting information?
13. Neighbor/friend/associate
14. Internet
15. Print
16. Extension
17. ATTRA
18. Oregon Tilth
19. ACRES
20. Other \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Interviewer: Please offer respondents a free registration to the ACRES agricultural composting workshop at the North Willamette Research & Extension Center (April 18 and 25, 2013).