Illinois Environmental Protection Agency

2520 West Iles Avenue • P.O. Box 19276 • Springfield, Illinois • 62794-9276 • 217-782-3397

Division of Public Water Supplies, Permit Section
Schedule E - Liquid and Dry Chemicals - 35 Ill. Adm. Code Section 604 Subpart K

*This form may be completed within Acrobat and printed. You may also complete a printed copy manually. Submit the completed form to the **Illinois EPA, Division of Public Water Supplies, Permit Section #13** at the address listed above.*

Name of Public Water Supply: _____ ID# IL: _____

Project Title: _____

Project Location (street address): _____

Type of location this chemical will be fed at (new treatment plant, existing treatment plant, storage tank, pump station, distribution system): _____

1. Chemical name (include manufacturer and brand name if applicable): _____
2. MSDS Sheet was submitted? ☐ Yes ☐ No
3. Type of plant it is being added at, groundwater or surface water, or location such as a booster station: _____
4. Function of chemical: _____
5. Calculations were submitted showing:
   a. Quantity of chemical required: _____
   b. Quantity of chemical applied at minimum flow: _____
   c. Quantity of chemical applied and plant design flow: _____
   d. Chemical dosage in mg/L: _____
   e. If Chlorine:
      i. Is the design large enough to satisfy the immediate chlorine demand and give a measurable residual of at least 2.0 mg/L of total chlorine under all operating conditions after contact ☐ Yes ☐ No
      ii. Be capable of feeding chlorine to the water being treated at a dosage rate of at least 5.0 mg/L: ☐ Yes ☐ No
6. How will the feed function (operate with well or high service pump, or based on flow): _____
7. Where in the treatment chain of the location will it be added (head of plant, pre high service pumps, etc.): _____
8. List where in the treatment process or piping will this chemical be injected: _____
9. Was a treatment system diagram showing all treatment equipment submitted showing the point of chemical application, and design capacity of all equipment: ☐ Yes ☐ No
10. How will chemical be stored (bulk storage or shipping containers): _____
11. Pumps (If not using chemical pumps skip to 12)
    a. Number of Pumps: _____
    b. Flow (gallons or pounds per minute or day): _____
    c. Pressure (psi or head in feet) of each pump: _____
    d. Are calibration tubes or mass flow monitors provided: ☐ Yes ☐ No
12. Can chemical be applied with largest pump out of service: ☐ Yes ☐ No

This Agency is authorized to request this information under 415 ILCS 5/4(b)(2012). Disclosure of this information is voluntary and no penalties will result from the failure to provide the information. However, the absence of the information could prevent your application from being processed or could result in denial of your application from being or could result in denial of your application for certification. This form has been approved by the Forms Management Center.

13. If day tank: (If not using day tank skip to 14)
    a. Number of Tanks: _____
    b. Volume (gallons) _____
    c. Dimensions (ft) _____
    c. Material: _____
14. If bulk tank (If not using bulk tank skip to 15)
    a. Number of Tanks: _____
    b. Volume (gallons) _____
    c. Dimensions (ft) _____
    c. Material: _____
15. If using Piston and Diaphragm Pumps, confirm they operate at no less than 20% of feed range, or no less than 10% if equipped with two fully independent adjustment mechanisms (e.g., pulse rate and stroke length). ☐Yes ☐No
16. If using Peristaltic Pumps, Confirm: (If not using Peristaltic Pumps skip to 17)
    a. Manufacturer Certification: Does pump, meet 604.1100(c)(6) ☐Yes ☐No If No, the manufacturer must certify that feed accuracy is consistent across the full operating range. -*The manufacturer certifies accuracy down to 1 GPH*
    b. Tubing Selection: Was tubing diameter sized to meet required feed rates while remaining as small as practical to reduce overfeed potential. ☐Yes ☐No No Describe as follows: *1/2 inch tubing is proposed to provide 0.05 to 0.4 ft/s of chemical velocity.*
    c. Verification Testing: Before placing a peristaltic pump into service—and after any tube replacement—operators must perform a timed drawdown test under normal operating conditions to verify mL/min feed rate. This documented test shall be physically displayed by the feed pump with the date and on the monthly operating reports, with the date of any "tube" change-outs. *Calibration columns are provided and test will be provided.*
17. Is chemical stored and/or fed in a separate room or the same room alone or only with compatible chemicals: ☐Yes ☐No
18. Are chemical containers labeled? ☐Yes ☐No
19. NSF 60 for proposed chemical: _____
20. Specify solution feed equipment: _____
21. Describe feeder redundancy: _____
22. Describe controls: _____
23. Are dry chemical feeders proposed: ☐Yes ☐No
24. Positive displacement pumps: ☐Yes ☐No
25. Describe the type of anti-siphon protection provided: _____
26. Describe cross-connection control: _____
27. Is chemical addition equipment readily accessible for service: ☐Yes ☐No
28. Is there a make-up water line : ☐Yes ☐No Describe cross connection control: _____
29. Is space for 30 days or more of storage: ☐Yes ☐No
30. Is offloading area labeled: ☐Yes ☐No
31. Are chemicals stored in confined space: ☐Yes ☐No
32. Are containers covered: ☐Yes ☐No
33. Are chemicals stored inside a building: ☐Yes ☐No
34. Do liquid tanks have liquid level gauges/indicators: ☐Yes ☐No
35. Do liquid bulk, shipping containers, and/or day tanks have secondary containment: ☐Yes ☐No
36. Are vents open down-turned covered with noncorrodible screen: ☐Yes ☐No
37. Describe feed lines material and diameter: _____
38. Will include handling dry chemicals: ☐Yes ☐No
39. Describe housing: _____
40. Are bulk and/or day tanks vented : ☐Yes ☐No If an acid or sodium hypochlorite, will they be vented to the outside, open downward, and be covered with #24 mesh non-corrodible screen: ☐Yes ☐No
41. Will chemical feed lines be labeled and color coded: ☐Yes ☐No Describe color: _____