

SOLVENT CLEANING OPERATION EQUIPMENT SUMMARY FORM-44

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(This form must be submitted for each equipment item)

GENERAL

1. MANUFACTURER _____ MODEL _____

2. SERIAL NUMBER _____ DATE OF INSTALLATION _____
(leave blank if not installed)

3. DEVICE TYPE *(Check ✓ one)*

- | | | |
|--|---|---|
| <input type="checkbox"/> Batch-Load Cold Solvent Cleaner | <input type="checkbox"/> Batch-Load Vapor Solvent Cleaner | <input type="checkbox"/> Solvent Spray Sink |
| <input type="checkbox"/> Conveyorized Cold Solvent Cleaner | <input type="checkbox"/> Conveyorized Vapor Solvent Cleaner | <input type="checkbox"/> Batch-Load Dip Tank |
| <input type="checkbox"/> Remote Reservoir Cold Cleaner | <input type="checkbox"/> Gas/Liquid-Path Cleaner | <input type="checkbox"/> Closed-Loop (sealed) Cleaner |
| <input type="checkbox"/> Other <i>(describe)</i> _____ | | |

4. DEVICE LOCATION _____ Building _____ Room _____
(street address)

5. DESCRIBE THE PARTS (PART NAME(S) AND COMPOSITION(S)) THAT ARE CLEANED IN AND/OR WITH THE DEVICE

★ Submit manufacturer's literature, catalog, or equivalent information for the equipment unit ★

SPECIFICATIONS

6. TOTAL NUMBER OF SOLVENT TANKS _____ 1 / 2 / 3 _____ TOTAL TANK VOLUME _____ gallons
(circle one)

7. DEVICE OVERALL OUTSIDE DIMENSIONS
Width _____ inches Length _____ inches Height _____ inches

Person Completing this Form (please print)

Facility (Doing Business As) Name

Employed By

Date

I, by completing this form, understand that the responses given by me to the questions asked within will be used to establish emission limits on my permit and that the responses represent the maximum design capacity of the equipment.

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8. SOLVENT TANK DIMENSIONS (If more than one tank, list separately for each tank - use separate sheet if necessary)

a. Width _____ inches Length _____ inches Depth _____ inches
b. Freeboard Height _____ inches Freeboard Ratio _____

9. TOTAL EVAPORATIVE SURFACE AREA _____ square feet

10. COVER TYPE (Check ✓ one)

Sliding Rolling Guillotine None
 Other (describe) _____

11. SOLVENT FLOW TYPE (Check ✓ one)

None Continuous Fluid Stream Fine, Atomized, or Shower Type
 Other (list) _____

12. LIP EXHAUST SYSTEM ELECTRIC MOTOR HORSEPOWER RATING _____ N/A - No Lip Exhaust

13. SOLVENT AGITATION PUMP HORSEPOWER RATING _____ N/A - No Solvent Agitation

14. SOLVENT FLOW PUMP ELECTRIC MOTOR HORSEPOWER RATING _____ N/A - No Solvent Flow

EMISSIONS CONTROLS

15. WHEN OPERATIONAL, WILL THE DEVICE BE EQUIPPED WITH A WATER COVER?

No (If selected, skip the rest of Question 15) Yes (If selected, complete (a) and (b) below)

a. Minimum Water Depth _____ inch(es)

b. Solvent Solubility in Water Negligible Infinite Miscible
 Soluble Complete Produces Two Layers
 % by Weight _____ Other (list) _____

16. WHEN OPERATIONAL, WILL THE DEVICE BE CONNECTED TO AN EMISSIONS CONTROL SYSTEM?

No Yes ⇒ Does the System Meet the Requirements of SBCAPCD Rule 321, Section M?

No Yes ⇒ Provide Evidence of Compliance With Rule 321.M

★ Contact the APCD for additional requirements if the device is connected to an emissions control system ★

SOLVENT DATA

17. TYPE (Check ✓ all that apply)

Methylene Chloride Perchloroethylene Trichloroethylene 1,1,1-Trichloroethane
 Carbon Tetrachloride Chloroform Any Combination of these in a Concentration > 5% (by wt)
 Other (list) _____

18. DENSITY _____ pounds per gallon ROC CONTENT _____ weight percent / lb/gallon
(circle one)

19. INITIAL BOILING POINT _____ °F

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20. IS THE SOLVENT HEATED ABOVE THE AMBIENT ROOM TEMPERATURE DURING AND/OR PRIOR TO USE?

No (If selected, skip the rest of Question 20) Yes (If selected, complete (a) and (b) below)

a. Maximum Temperature to Which Solvent is Heated _____ °F

b. Solvent Heater Electric Rating _____ kilowatts

21. MAXIMUM MONTHLY SOLVENT USE _____ gallons

★ Submit material safety data sheet (MSDS), air quality data sheet, or equivalent information for the solvent(s) ★

POTENTIAL TO EMIT

22. DO YOU WISH TO COMPUTE THE DEVICE'S POTENTIAL TO EMIT BY USING A METHOD DIFFERENT FROM THAT CONTAINED WITHIN QUESTIONS 23, 24, AND 25?

No Yes ⇨ Enclose Detailed Emissions and/or Engineering Calculations. Selecting this Option Will Result in More Extensive Recordkeeping and Reporting Requirements than those Contained in SBCAPCD Rule 321. Skip Questions 23, 24, and 25.

23. MULTIPLY THE MAXIMUM MONTHLY SOLVENT USE LISTED IN QUESTION 21 BY THE SOLVENT DENSITY LISTED IN QUESTION 18 BY THE REACTIVE ORGANIC COMPOUNDS (ROC) CONTENT WEIGHT PERCENTAGE

_____ × _____ × _____ = _____ pounds ROC emissions per month
(gal/mon) (lb/gal) (percent)

24. DIVIDE THE RESULTANT VALUE COMPUTED IN QUESTION 23 BY 21.7 (days per month)

_____ ÷ 21.7 = _____ pounds ROC emissions per day
(lb ROC/mo)

25. MULTIPLY THE RESULTANT VALUE COMPUTED IN QUESTION 23 BY 12 (months per year) AND DIVIDE BY 2000 (pounds per ton)

_____ × 12 ÷ 2000 = _____ tons ROC emissions per year
(lb ROC/mo)

★ Submit engineering and emission calculations if you selected "yes" to Question 22 ★

SOLVENT CLEANER REQUIREMENTS

26. WILL PARTS CLEANED IN THE DEVICE BE DRIED BY SOLVENT ATOMIZATION (E.G., BLOW DRYING)?

No Yes ⇨ Is the Solvent Atomization Operation Vented to an Emissions Control System?

No Yes ⇨ Does the System Meet the Requirements of SBCAPCD Rule 321, Section M?

No Yes ⇨ Provide Evidence of Compliance With Rule 321.M

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27. IS THE DEVICE EQUIPPED WITH A FACILITY OR DEVICE FOR DRAINING CLEANED PARTS SUCH THAT THE DRAINED SOLVENT OR DRAG-OUT IS RETURNED TO THE SOLVENT TANK?

- No Yes ⇨ Is the Drainage Facility Internal so that the Parts are Within the Solvent Cleaner and Under the Cover While Draining?
 Yes No

28. WILL/ARE THE APPLICABLE OPERATING REQUIREMENTS CONTAINED IN SBCAPCD RULE 321 SECTIONS D, E, AND F LEGIBLY WRITTEN AND PERMANENTLY AND CONSPICUOUSLY POSTED ON OR NEAR THE EQUIPMENT IN SUCH A MANNER THAT IT IS CONVENIENTLY AVAILABLE TO THE OPERATOR FOR REFERENCE PURPOSES?

- Yes No

29. IS THE DEVICE EQUIPPED WITH A SOLVENT AGITATION SYSTEM?

- No Yes ⇨ (select type(s)):
- | | |
|---|--|
| <input type="checkbox"/> Pump Recirculation | <input type="checkbox"/> Mechanical Mixing (mixer) |
| <input type="checkbox"/> Ultrasonics | <input type="checkbox"/> Gas or Air |
| <input type="checkbox"/> Other (list) _____ | |

30. WHEN OPERATIONAL, WILL THE DEVICE BE CONNECTED TO ANY OF THE FOLLOWING (Check ✓ all that apply)

- Hood Enclosure Lip Exhaust ⇨ Is this device connected to an emissions control system compliant with Rule 321.M? Yes No
- No Exhaust System - Exhaust Directly to Atmosphere

31. IS THE DEVICE EQUIPPED WITH A POWERED PARTS HOIST OR CONVEYOR?

- No Yes ⇨ Maximum Vertical Lift Speed _____ feet/minute

★ Complete and submit form APCD-9 if the device is connected to a hood or enclosure ★

COLD SOLVENT CLEANER REQUIREMENTS

★ Complete this section if device is any type of cold solvent cleaner ★

32. DOES THE DEVICE HAVE A PERMANENT, CONSPICUOUS MARK LOCATING THE MAXIMUM ALLOWABLE SOLVENT LEVEL CONFORMING TO THE APPLICABLE FREEBOARD REQUIREMENT?

- Yes No

VAPOR SOLVENT CLEANER REQUIREMENTS

★ Complete this section if device is any type of vapor solvent cleaner ★

33. MAXIMUM WORKLOAD AREA _____ square feet

34. IS THE DEVICE EQUIPPED WITH A PRIMARY CONDENSER COIL SITUATED ABOVE THE BOILING SOLVENT?

- Yes No

35. IS THE DEVICE EQUIPPED WITH A CONDENSER FLOW SWITCH THAT SHUTS OFF THE SUMP HEATER IF THE CONDENSER COOLANT STOPS CIRCULATING OR BECOMES WARMER THAN ITS DESIGNED OPERATING TEMPERATURE?

- Yes No

36. IS THE DEVICE EQUIPPED WITH A HIGH VAPOR CUTOFF THERMOSTAT THAT SHUTS OFF THE SUMP HEATER WHEN THE SOLVENT VAPOR LEVEL RISES ABOVE THE DESIGNED OPERATING LEVEL?

- Yes No

37. IS THE DEVICE EQUIPPED WITH A SOLVENT FLOW MECHANISM (E.G., SPRAY WAND)?

- No Yes ⇨ Is There a Device That Prevents Solvent Flow Pump Operation Unless the Solvent Vapor Level is at the Designed Operating Level?

- Yes No

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38. IS THE DEVICE EQUIPPED WITH A REFRIGERATED FREEBOARD CHILLER?

No (If selected, skip the rest of Question 38) Yes (If selected, complete (a) and (b) below)

a. Temperature at the Coldest Point on the Vertical Axis in the Center of the Air-Vapor Interface _____ °F

b. Is the Refrigerated Freeboard Chiller Equipped With an Automatic Defrost?

Yes No

39. IS THE DEVICE OF AN ENCLOSED DESIGN IN WHICH THE COVER OR DOOR OPENS ONLY WHEN THE DRY PART IS ACTUALLY ENTERING OR EXITING THE CLEANER?

Yes No

REMOTE RESERVOIR COLD CLEANER REQUIREMENTS

★ Complete this section if device is any type of remote reservoir cold cleaner ★

40. IS THE SINK OR WORK AREA SLOPED SUFFICIENTLY TOWARDS THE DRAIN TO PREVENT POOLING OF SOLVENT?

Yes No

41. HOW MANY DRAIN HOLES DOES THE DEVICE HAVE THAT ARE USED FOR RETURNING THE SOLVENT FLOW FROM THE SINK BACK INTO THE ENCLOSED RESERVOIR? _____

42. TOTAL DRAIN HOLE AREA _____ square inches (Note: Area of Circle = 0.7854 × Diameter × Diameter)

43. MEANS OF PREVENTING SOLVENT VAPOR FROM ESCAPING FROM THE SOLVENT CONTAINER WHEN THE REMOTE RESERVOIR IS NOT BEING USED, CLEANED, OR REPAIRED (Check ✓ all that apply)

N/A - No Means Closing a Cover Use of a Valve or Drain Plug

Other (describe) _____

CONVEYORIZED COLD SOLVENT CLEANER REQUIREMENTS

★ Complete this section if device is any type of conveyORIZED cold solvent cleaner ★

44. IS THE DEVICE EQUIPPED WITH ANY OF THE FOLLOWING MEANS OF PREVENTING CLEANED PARTS FROM CARRYING OUT SOLVENT LIQUID OR VAPOR? (Check ✓ all that apply)

Rotating Basket Tumbling Basket Drying Tunnel None

Other (list) _____

45. AVERAGE CLEARANCE BETWEEN WORKLOAD MATERIAL AND THE EDGES OF THE DEVICE ENTRANCE AND EXIT OPENINGS _____ inch(es)

46. DEVICE ENTRANCE OPENING WIDTH _____ inch(es)

47. IS THE DEVICE EQUIPPED WITH DOWN-TIME COVERS FOR COMPLETELY CLOSING OFF BOTH THE DEVICE ENTRANCE AND EXIT OPENINGS DURING SHUTDOWN HOURS?

Yes No ⇨ Percentage of Openings Covered Entrance _____ % Exit _____ %

CONVEYORIZED VAPOR SOLVENT CLEANER REQUIREMENTS

★ Complete this section if device is any type of conveyORIZED vapor solvent cleaner ★

48. MAXIMUM WORKLOAD AREA _____ square feet

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49. IS THE DEVICE EQUIPPED WITH ANY OF THE FOLLOWING MEANS OF PREVENTING CLEANED PARTS FROM CARRYING OUT SOLVENT LIQUID OR VAPOR? (Check ✓ all that apply)

Rotating Basket Tumbling Basket Drying Tunnel Other (list) _____

50. AVERAGE CLEARANCE BETWEEN WORKLOAD MATERIAL AND THE EDGES OF THE DEVICE ENTRANCE AND EXIT OPENINGS _____ inch(es)

51. DEVICE ENTRANCE OPENING WIDTH _____ inch(es)

52. IS THE DEVICE EQUIPPED WITH DOWN-TIME COVERS FOR COMPLETELY CLOSING OFF BOTH THE DEVICE ENTRANCE AND EXIT OPENINGS DURING SHUTDOWN HOURS?

Yes No ⇨ Percentage of Openings Covered Entrance _____ % Exit _____ %

53. IS THE DEVICE EQUIPPED WITH A PRIMARY CONDENSER COIL SITUATED ABOVE THE BOILING SOLVENT?

Yes No

54. IS THE DEVICE EQUIPPED WITH A CONDENSER FLOW SWITCH THAT SHUTS OFF THE SUMP HEATER IF THE CONDENSER COOLANT STOPS CIRCULATING OR BECOMES WARMER THAN ITS DESIGNED OPERATING TEMPERATURE?

Yes No

55. IS THE DEVICE EQUIPPED WITH A HIGH VAPOR CUTOFF THERMOSTAT THAT SHUTS OFF THE SUMP HEATER WHEN THE SOLVENT VAPOR LEVEL RISES ABOVE THE DESIGNED OPERATING LEVEL?

Yes No

56. IS THE DEVICE EQUIPPED WITH A SOLVENT FLOW MECHANISM (E.G., SPRAY WAND)?

No Yes ⇨ Is There a Device That Prevents Solvent Flow Pump Operation Unless the Solvent Vapor Level is at the Designed Operating Level?

Yes No

57. IS THE DEVICE EQUIPPED WITH A REFRIGERATED FREEBOARD CHILLER?

No (If selected, skip the rest of Question 57) Yes (If selected, complete (a) and (b) below)

a. Temperature at the Coldest Point on the Vertical Axis in the Center of the Air-Vapor Interface _____ °F

b. Is the Refrigerated Freeboard Chiller Equipped With an Automatic Defrost?

Yes No

58. IS THE DEVICE OF AN ENCLOSED DESIGN IN WHICH THE COVER OR DOOR OPENS ONLY WHEN THE DRY PART IS ACTUALLY ENTERING OR EXITING THE CLEANER?

Yes No

★ This concludes this form. Please check that you have answered all questions and enclosed the required attachments. ★