# **APPENDIX A**

## Phase I Survey Instruments and Materials

Appendix A contains the following:

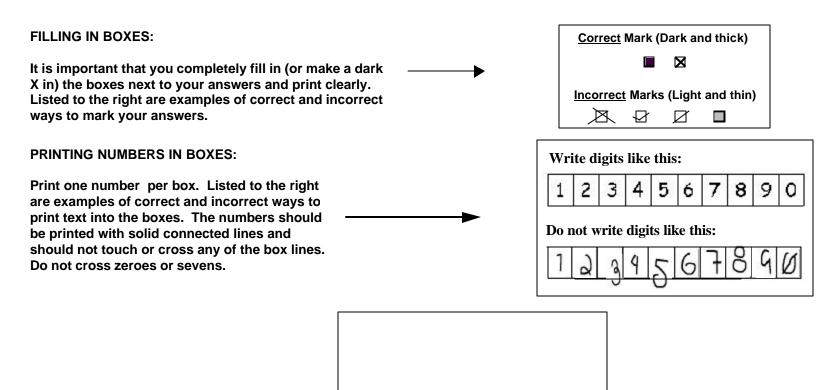
- 1. Facilities Questionnaire
- 2. Teacher Questionnaire
- 3. Superintendent Letter
- 4. Principal Letter
- 5. Postcard to Superintendent
- 6. Postcard to Principal
- 7. Introductory Letter to Principal
- 8. Introductory Letter to Teacher
- 9. Introductory Letter to Facility Manager
- 10. Introductory Letter to Study Coordinator
- 11. Instructions for Selecting Classrooms
- 12. Instructions for Formaldehyde Placement
- 13. Study Coordinator Checklist with Formaldehyde
- 14. Study Coordinator Checklist without Formaldehyde
- 15. Study Brochure
- 16. Preparation for Mailout
- 17. Thank You/Reminder Postcard
- 18. Non-response Conversion Letter

Dear Facility Manager,

Thank you for participating in the California Portable Classrooms Study. Your support is critical to the success of obtaining useful statewide results. Results from this study will be used to identify potential environmental problems, determine if and to what extent they occur, and make recommendations to resolve current and future problems.

The following questionnaire is designed to be completed by the school's facility manager, who may be in the district office. The district facility manager has been notified that he/she may need to assist the schools in completing the questionnaire. Section B of the questionnaire asks about the school site as a whole, whereas Section C asks about the three sample classrooms. Before completing this questionnaire, please review the instructions below. To fill in boxes, use a black ink pen or the enclosed #2 pencil to apply dark marks to the questionnaire boxes. Please do not fold this questionnaire.

After you have finished the questionnaire, please seal it in the white envelope and return it and a copy of the school site map to the study coordinator. If you have any questions about the questionnaire, please call Mr. Michael Phillips, the RTI Survey Manager, at 1-800-334-8571, Ext. 6276. Call before 2:00 pm Pacific time or leave a voice mail message.





Section A. Respondent Information
Please fill in today's date (mm-dd-yy)
1. Your job category: 🗆 facilities manager 🛛 assistant manager 🖓 maintenance staff 🖓 custodial staff 🖓 administrative staff 🖓 other
2. Your work location is: $\Box$ district-wide $\Box$ at this school only $\Box$ at several sites
3. Years you have worked at this school (in years): $\Box$ 1 $\Box$ 2-5 $\Box$ 6+
4. May we contact you later to verify or clarify your responses, if necessary? □ Yes □ No
5. If Yes, please enter the following: Phone number
E-mail address:
B. School Site Characteristics and Maintenance Practices (Fill in all that apply for the entire site)
School Site
6. Year of the school's original construction:
7. Total number of classrooms at this site: Portable- relocatable Permanent- traditional
8. Building density near the school: □ Urban □ Suburban □ Rural
9. Nearby areas or typical activities (within 1/4 mile): (Mark all that apply)
Roadways:



HVAC Maintenance: 10. HVAC maintenance done by: (Mark all that apply) □ school staff □ district staff □ contractor □ none □ don't know □ not applicable 11. Where are maintenance logs for HVAC kept? (Mark all that apply) □ not kept □ on equipment □ paper files □ computer □ contractor □ other □ don't know 12. Typical thermostat setting during classes (degrees F): Cooling Heating 13. Are thermostats usually set back or shut down? (Mark all that apply) □ never □ nights □ weekends □ holidays □ summer vacation □ don't know □ not applicable 14. Daily start time of system on school days:  $\Box$  when first class starts  $\Box$  when teacher arrives  $\Box$  1-2 hours before classes start  $\Box$  don't know  $\Box$  not applicable 15. Regular inspection and maintenance: 
Yes No not applicable → If Yes, how frequently are the following items inspected and maintained (check one)? Outdoor air damper setting: 
monthly □ quarterly □ annually  $\Box$  more than annually □ not applicable never □ don't know Coils cleaned:  $\Box$  more than annually □ not applicable □ monthly □ quarterly □ annually □ never □ don't know Condensate pan and drain: □ monthly □ quarterly □ annually  $\Box$  more than annually □ never □ don't know □ not applicable HVAC filter replaced: □ monthly □ don't know □ not applicable □ quarterly □ annually  $\Box$  more than annually □ never Heat exchanger checked: 

monthly  $\Box$  more than annually □ not applicable □ quarterly □ annuallv never □ don't know Other Maintenance Practices: 16. Frequency of usual custodial services for classrooms: Trash removed: □ 1-2 days per week  $\Box$  <1 per month □ 5 days per week □ 3-4 days per week □ 1-2 per month Vacuumed, swept, and dusted: 

5 days per week □ 3-4 days per week □ 1-2 days per week  $\Box$  <1 per month □ 1-2 per month Carpets steam- or dry-cleaned: 
augusterly □ annually  $\Box$  >annually □ don't know □ not applicable (Mark all that apply) 17. General building maintenance and repairs are done by: □ school staff □ district staff □ contractor □ none □ don't know 18. Number of building maintenance staff assigned to the school (full-time school or contract personnel): 19. Are you aware of the U.S. EPA's IAQ Tools for Schools Program?  $\Box$  Yes  $\Box$  No  $\longrightarrow$  If Yes, does your school use their kit?  $\Box$  Yes  $\Box$  No  $\Box$  don't know



#### Pesticides Practices:



(For Questions 20 -23, mark <u>all</u> that apply)

20. Types of pesticides used at the school: 20. Types of pesticides used at the school: 21. Regularly scheduled applications: 22. Routine applications done by: 23. Usual frequency of <u>classroom</u> applications: 23. Usual frequency of <u>classroom</u> applications: 24. Routine applications done by: 25. Routine applications done by: 26. Routine applications done by: 27. Routine applications done by: 28. Routine applications done by: 29. Routine applications done by: 20. Types of pesticides applications: 20. Types of pesticides applications: 20. Types of pesticides applications done by: 20. Types of pesticides applications: 20. Types of pesticides applications done by: 

24. Have you implemented an Integrated Pest Management (IPM) program at this site?: 
Yes ON O don't know

#### **Environmental Complaints**

25. In the last year, have major complaints of environmental conditions been made for any classroom at this site? □ Yes □ No □ don't know → If Yes, please check a number category below, for both portable and permanent classrooms:

Type of Complaint	Number of P	Number of Portable - Relocatable Classrooms			Number of Permanent -Traditional Classrooms			al Classrooms		
Roof leak		□1	□ 2-4	□ 5-9	□ 10+	□ none	□ 1	□ 2-4	□ 5-9	□ 10+
Plumbing leak or flood		□1	□ 2-4	□ 5-9	□ 10+	□ none	□ 1	□ 2-4	□ 5-9	□ 10+
Air quality/odor		□ 1 □	□ 2-4	□ 5-9	□ 10+	□ none	□ 1	□ 2-4	□ 5-9	□ 10+
Mold	none [	□ 1 □	□ 2-4	□ 5-9	□ 10+	□ none	□ 1	□ 2-4	□ 5-9	□ 10+
Temperature		□ 1	□ 2-4	□ 5-9	□ 10+	□ none	□ 1	□ 2-4	□ 5-9	□ 10+
Noise		□ 1	□ 2-4	□ 5-9	□ 10+	□ none	□ 1	□ 2-4	□ 5-9	□ 10+

26. Who responds to environmental complaints or concerns in the school's buildings?: (Mark all that apply)

district mainter	nance staff	district health & safety staff	□ district	risk mana	igement staff
🗆 school nurse	outside	consultant (industrial hygienist)	□ other	□ none	🗆 don't know

#### PROCEED TO SECTION C, QUESTIONS FOR CLASSROOMS A, B, AND C



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C. Classroom Description (Fill in all that apply for each selected Room A, B, and C.) Note: DK= don't know and NA= not applicable.

Please fill in the room numbers/names: Building Characteristics:	<u>Room A</u>	<u>Room B</u>	<u>Room C</u>
27. Portable or relocatable classroom:	□ Yes □ No	□ Yes □ No	□ Yes □ No
If Yes, name of manufacturer	———— 🗆 рк	———— 🗆 DK	DК
→ Type of portable?	DSA DOH DK	□ DSA □ DOH □ DK	□ dsa □ doh □ dk
Number of times relocated in the last 3 years?			
28. Date of construction or manufacture (approximate year)			
29. Major renovations or additions:	□ addition □ roof	□ addition □ roof	□ addition □ roof
(Mark <u>all</u> that apply)	🗆 lighting 🛛 floor	□ lighting □ floor	□ lighting □ floor
	□ HVAC □ wall	□ HVAC □ wall	□ HVAC □ wall
30. Major remediations: <i>(Mark <u>all</u> that apply)</i>	□ asbestos □ mold	□ asbestos □ mold	□ asbestos □ mold
(Mark <u>an</u> that apply)	□ lead □ other	□ lead □ other	□ lead □ other
31. Classroom size (square feet):	□ <600 □ 600-1100	□ <600 □ 600-1100	□ <600 □ 600-1100
	□ 1101-2000 □ >2000	□ 1101-2000 □ >2000	□ 1101-2000 □ >2000
32. Number of classrooms in			
the building:	□ 1 □ 2 □ 3-5	□1 □2 □3-5	□1 □2 □3-5
	□ 6-9 □ 10 or more	□ 6-9 □ 10 or more	□ 6-9 □ 10 or more
		-5-	

	Room A	Room B	Room C
33. Floor level of this classroom	□ below grade □ ground	□ below grade □ ground	□ below grade □ ground
	□ 2nd story □ 3rd story or more	□ 2nd story □ 3rd story or more	□ 2nd story □ 3rd story or more
34. Type of building foundation	☐ below grade	☐ below grade	□ below grade
	☐ slab on grade	☐ slab on grade	□ slab on grade
	☐ raised floor	☐ raised floor	□ raised floor
→ If Raised Floor, type of ground cover: (Mark <u>all</u> that apply)	☐ dirt ☐ gravel ☐ plastic ☐ concrete or asphalt ☐ other	☐ dirt	□ dirt □ gravel □ plastic □ concrete or asphalt □ other
→ If Raised Floor, inche	s □ <6 □ 6-11	□ <6 □ 6-11	□ <6 □ 6-11
above ground :	□ 12-17 □ 18 or more	□ 12-17 □ 18 or more	□ 12-17 □ 18 or more
35. Roof last replaced (in years):	□ 1-4 □ 5-9	□ 1-4 □ 5-9	□ 1-4 □ 5-9
	□ 10-19 □ 20 or more	□ 10-19 □ 20 or more	□ 10-19 □ 20 or more
	□ DK	□ DK	□ DK
36. Type of roof	<ul> <li>□ membrane</li> <li>□ composite shingle or roll</li> <li>□ shake</li> <li>□ metal</li> <li>□ tar and gravel</li> <li>□ other</li> </ul>	<ul> <li>□ membrane</li> <li>□ composite shingle or roll</li> <li>□ shake</li> <li>□ metal</li> <li>□ tar and gravel</li> <li>□ other</li> </ul>	<ul> <li>□ membrane</li> <li>□ composite shingle or roll</li> <li>□ shake</li> <li>□ metal</li> <li>□ tar and gravel</li> <li>□ other</li> </ul>
37. Roof pitch	□ flat □ sloped □ both	□ flat □ sloped □ both	□ flat □ sloped □ both
38. Suspended ceilings:	□ Yes □ No	□ Yes □ No	□ Yes □ No



	Room A	Room B	Room C
39. Are any of these within 50 feet of the classroom? <i>(Mark <u>all</u> that apply)</i>	<ul> <li>parking lot or roadway</li> <li>loading dock art room</li> <li>flue exhaust shop</li> <li>dumpster cafeteria</li> <li>custodial room science lab</li> <li>bathroom</li> </ul>	<ul> <li>parking lot or roadway</li> <li>loading dock</li> <li>art room</li> <li>flue exhaust</li> <li>shop</li> <li>dumpster</li> <li>cafeteria</li> <li>custodial room</li> <li>science lab</li> <li>bathroom</li> </ul>	<ul> <li>parking lot or roadway</li> <li>loading dock art room</li> <li>flue exhaust shop</li> <li>dumpster cafeteria</li> <li>custodial room science lab</li> <li>bathroom</li> </ul>
40. Peeling paint?	$\Box$ inside $\Box$ outside $\Box$ none	□ inside □ outside □ none	$\Box$ inside $\Box$ outside $\Box$ none
HVAC Characteristics			
41. Packaged HVAC unit	□ Yes □ No □ DK □ NA	□Yes □No □DK □NA	□Yes □No □DK □NA
42. Location of main air handler unit (AHU)	□ floor □ wall □ roof □ other □ DK □ NA	☐ floor ☐ wall ☐ roof ☐ other ☐ DK ☐ NA	□ floor □ wall □ roof □ other □ DK □ NA
43. Type of main heating system:	□ forced air □ radiant □ solar □ other □ DK □ NA	□ forced air □ radiant □ solar □ other □ DK □ NA	□ forced air □ radiant □ solar □ other □ DK □ NA
44. Heating fuel or energy type:	□ electric □ gas □ solar □ other □ DK □ NA	□ electric □ gas □ solar □ other □ DK □ NA	□ electric □ gas □ solar □ other □ DK □ NA



	Room A	Room B	Room C
system:	central AC □ window AC □ swamp other □ DK □ NA	□ central AC □ window AC □ swamp □ other □ DK □ NA	□ central AC □ window AC □ swamp □ other □ DK □ NA
46. Mode of supply fan operation	□ Auto (only when heating or cooling) □ Always on □ Always off □ Other □ DK □ NA	<ul> <li>□ Auto (only when heating or cooling)</li> <li>□ Always on</li> <li>□ Always off</li> <li>□ Other</li> <li>□ DK</li> <li>□ NA</li> </ul>	<ul> <li>☐ Auto (only when heating or cooling)</li> <li>☐ Always on</li> <li>☐ Always off</li> <li>☐ Other</li> <li>☐ DK</li> <li>☐ NA</li> </ul>
47. Economizer	□Yes □No □DK □NA	□Yes □No □DK □NA	□Yes □No □DK □NA
48. Minimum setting of outdoor air damper (%):	□ don't know	□ don't know	□ don't know
49. Type of return vents: (Mark <u>all</u> that apply)	□ open plenum □ ducted □ other □ DK □ NA	□ open plenum □ ducted □ other □ DK □ NA	□ open plenum □ ducted □ other □ DK □ NA
50. Filter type: <i>(Mark <u>all</u> that apply</i> )	☐ fiberglass mesh  ☐ pleated □ high efficiency □ other  □ DK  □ NA	<ul> <li>☐ fiberglass mesh</li> <li>☐ pleated</li> <li>☐ high efficiency</li> <li>☐ other</li> <li>☐ DK</li> <li>☐ NA</li> </ul>	☐ fiberglass mesh ☐ pleated ☐ high efficiency ☐ other ☐ DK ☐ NA
51. Type of supply ductwork: (Mark <u>all</u> that apply)	☐ flexible	☐ flexible	□ flexible □ sheet metal □ other □ DK □ NA
52. Thermostat control by:	□ maintenance staff □ teacher □ central energy management system □ other □ DK □ NA	<ul> <li>□ maintenance staff</li> <li>□ teacher</li> <li>□ central energy management system</li> <li>□ other</li> <li>□ DK</li> <li>□ NA</li> </ul>	□ maintenance staff □ teacher □ central energy management system □ other □ DK □ NA

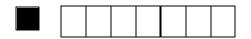


	Room A	Room B	<u>Room C</u>
Auxiliary Equipment			
53. Space heater(s): <i>(Mark <u>all</u> that apply)</i>	□ electric   □ gas   □ propane □ kerosene   □ wood   □ other □ none	□ electric   □ gas   □ propane □ kerosene   □ wood   □ other □ none	□ electric   □ gas   □ propane □ kerosene   □ wood   other □ none
54. Humidity control	□ humidifier □ dehumidifier □ NA	□ humidifier □ dehumidifier □ NA	□ humidifier □ dehumidifier □ NA
55. Fans <i>(Mark <u>all</u> that apply)</i>	□ ceiling □ window □ lab or range hood □ other □ DK □ none	□ ceiling □ window □ lab or range hood □ other □ DK □ none	□ ceiling □ window □ lab or range hood □ other □ DK □ none
Water and Moisture			
56. Type of flooding or leaks (in the last 3 years): (Mark <u>all</u> that apply)	<ul> <li>□ roof leak</li> <li>□ plumbing leak</li> <li>□ ground level</li> <li>□ other</li> <li>□ DK</li> <li>□ none</li> </ul>	□ roof leak □ plumbing leak □ ground level □ other □ DK □ none	□ roof leak □ plumbing leak □ ground level □ other □ DK □ none
57. Visible signs of mold growth (in the last 3 years): (Mark <u>all</u> that apply)	windowwallcarpetceilingclassroom itemfurniturecabinetotherDKnone	□ window□ wall□ carpet□ ceiling□ classroom item□ furniture□ cabinet□ other□ DK□ none	□ window□ wall□ carpet□ ceiling□ classroom item□ furniture□ cabinet□ other□ DK□ none
58. Lawn sprinklers spray the outside wall	□ Yes □ No □ DK	□Yes □No □DK	□Yes □No □DK
59. Standing water within 50 feet of the building?	□ never □ occassionally □ frequently □ DK	□ never □ occassionally □ frequently □ DK	□ never □ occassionally □ frequently □ DK



	Room A	Room B	<b>Room C</b>
Other Room Characteristics Mark if the room had any of the	following in the <u>last year</u> .		
60. New pressed wood-products:	<ul> <li>□ bookcases or cabinets</li> <li>□ tack boards</li> <li>□ desks</li> <li>□ chairs</li> <li>□ DK</li> <li>□ none</li> </ul>	<ul> <li>□ bookcases or cabinets</li> <li>□ tack boards</li> <li>□ desks</li> <li>□ chairs</li> <li>□ DK</li> <li>□ none</li> </ul>	<ul> <li>□ bookcases or cabinets</li> <li>□ tack boards</li> <li>□ desks</li> <li>□ chairs</li> <li>□ DK</li> <li>□ none</li> </ul>
61. Painting, caulking or sealing:	□ Yes □ No □ DK	□Yes □No □DK	□ Yes □ No □ DK
62. New floor covering:	□ carpet □ linoleum □ vinyl □ rubber □ wood □ other □ DK	□ carpet □ linoleum □ vinyl □ rubber □ wood □ other □ DK	□ carpet □ linoleum □ vinyl □ rubber □ wood □ other □ DK
63. Pesticides used in classroom: Lighting Fixtures	□ crack & crevice □ fumigation □ bomb □ spray can □ traps □ powder, pellet □ other □ DK □ none	<ul> <li>□ crack &amp; crevice</li> <li>□ fumigation</li> <li>□ bomb</li> <li>□ spray can</li> <li>□ traps</li> <li>□ powder, pellet</li> <li>□ other</li> <li>□ DK</li> <li>□ none</li> </ul>	<ul> <li>□ crack &amp; crevice</li> <li>□ fumigation</li> <li>□ bomb</li> <li>□ spray can</li> <li>□ traps</li> <li>□ powder, pellet</li> <li>□ other</li> <li>□ DK</li> <li>□ none</li> </ul>
64. Type of light bulbs: <i>(Mark <u>all</u> that apply)</i>	□ T8 fluorescent □ T12 fluorescent □ incandescent □ DK □ none	□ T8 fluorescent □ T12 fluorescent □ incandescent □ DK □ none	□ T8 fluorescent □ T12 fluorescent □ incandescent □ DK □ none

<u>Comments</u>: If you have any comments on site and classroom conditions, or on this study, please respond below.





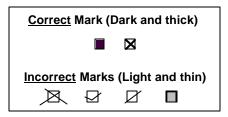
Dear Teacher,

Thank you for participating in the California Portable Classrooms Study. Your support is critical to the success of obtaining useful statewide results. Results from this study will be used to identify potential environmental problems, determine if and to what extent they occur, and make recommendations to resolve current and future problems. <u>Be assured that your responses remain confidential and will only be reported in summary reports to goverment researchers</u>.

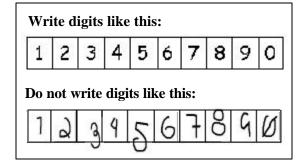
Please complete the following questionnaire regarding the room identified at the beginning of Section B. Please review the instructions below describing the correct and incorrect way to fill in boxes. Use a black ink pen or the enclosed #2 pencil to apply dark marks to the questionnaire boxes. Please do not fold this questionnaire. After you have finished the questionnaire please seal it in the white envelope and return it to the study coordinator.

If you have any questions about the questionnaire, please call Mr. Michael Phillips, the RTI Survey Manager, at 1-800-334-8571, ext. 6276. Call before 2:00 pm Pacific time or leave a voice mail message.

FILLING IN BOXES:



#### PRINTING NUMBERS IN BOXES:







Se	ction A. Respondent Information					
Ple	ease fill in today's date (mm-dd-yy)					
1.	Your gender and current age:  male  female  years					
2.	Your job category: □ teacher □ administrator □ facility staff □ aide □ office staff □ other					
3.	How long have you worked in this <u>room</u> ? $\Box$ Less than all year $\Box$ all year $\Box$ 2 $\Box$ 3+					
	in this <u>school</u> ? (years) □ 1 □ 2-5 □ 6-10 □ 11-16 □ 16+					
	• in the <u>teaching profession</u> ? (years) $\Box$ 1 $\Box$ 2-5 $\Box$ 6-10 $\Box$ 11-16 $\Box$ 16+					
	ction B. Room Description					
4.	<ul> <li>How much time do you typically spend in this classroom?</li> <li>days of the week: 1 2 3 4 5</li> <li>hours of the day: I less than 3 3-6 more than 6</li> </ul>					
5.	<ul> <li>5. Which term <u>best</u> describes this classroom? <i>Choose <u>one</u>:</i></li> <li>general instruction classroom</li> <li>ceramic studio</li> <li>library</li> <li>office</li> <li>art room</li> <li>computer lab</li> <li>auto/metal shop</li> <li>none of these</li> <li>science lab</li> <li>wood shop</li> <li>music room</li> </ul>					
6.	Which student grade level(s) are taught within this room? <i>Mark <u>all</u> that apply:</i> K       1       2       3       4       5       6         7       8       9       10       11       12       not applicable					
7.	Do students generally stay in this room or change rooms during the day? $\Box$ stay $\Box$ change					
8.	8. How many students per class typically occupy this room?					
9.	9. The building this classroom is in: $\Box$ portable or relocatable $\Box$ permanent $\Box$ don't know					
<ul> <li>10. Which best describes the flooring in this room? <i>Mark <u>all</u> that apply:</i></li> <li>Carpet:  <ul> <li>entire room</li> <li>partial</li> <li>area rug</li> <li>sitting pads</li> <li>Hard:  <ul> <li>vinyl/linoleum</li> <li>wood</li> <li>rubber</li> <li>concrete/ceramic</li> <li>walk-off mat(s)</li> </ul> </li> </ul></li></ul>						
11.	What is the primary wall material in this room? <b>Choose one</b> :  Sheetrock or plaster vinyl-coated tackable wallboard  other or don't know					



12. What, if any, plumbing is in this room? $\Box$ none $\Box$ sink $\Box$ toilet $\Box$ fountain							
13. How many sides of this room have windows? $\Box$ none $\Box$ 1 $\Box$ 2 $\Box$ 3 $\Box$ 4							
<ul> <li>14. What kinds of windows are in this room? <i>Mark <u>all</u> that apply</i>:</li> <li>□ none □ windows up to door height (7ft) □ windows up to 9 ft</li> <li>□ windows above 9 ft □ skylights</li> </ul>							
<ul> <li>15. How often do you open windows for natural ventilation, in general?</li> <li>□ rarely</li> <li>□ occasionally</li> <li>□ frequently</li> <li>□ most of the time</li> <li>□ all of the time</li> <li>□ none openable</li> </ul>							
16. Does a door into this room open directly to the outdoors? $\Box$ yes $\Box$ no							
<ul> <li>If yes, how often do you leave this door open during the school day, in general?</li> <li>rarely</li> <li>occasionally</li> <li>frequently</li> <li>most of the time</li> <li>all of the time</li> </ul>							
17. Does this room have air conditioning (AC)? $\Box$ yes $\Box$ no							
18. Is there a thermostat in this room? □ yes □ no □ don't know							
<ul> <li>If yes, indicate which is the case:</li> </ul>							
$\Box$ I can adjust it $\Box$ it is kept locked $\Box$ it does not work							
Section C. Room Contents & Activities							
<ul> <li>19. Indicate what kinds of furnishings are in this room. Mark <u>all</u> that apply:</li> <li>● Table &amp; Desks: □ none □ solid wood □ plastic</li> </ul>							

	□ metal	□ pressed wood*	□ don't know
<ul> <li>Bookcases:</li> </ul>	□ none	□ solid wood	□ plastic
	□ metal	□ pressed wood*	□ don't know
Cabinets:	□ none	□ solid wood	□ plastic
	□ metal	□ pressed wood*	□ don't know

\*Materials such as plywood and particle/fiber board; some may have a thin laminate.

- 20. Has the room acquired new furnishings during this school year? *Mark <u>all</u> that apply*:
  - □ don't know □ none □ tables □ bookcases □ cabinets
  - □ carpet □ desks/chairs
- 21. Do you keep any of the following living items in this room? Mark all that apply:
  - □ potted plants or terrarium □ mammals □ birds
  - □ reptiles/amphibians □ fish □ bugs



22.	Do you currently	have a	ny of the following i	items in this room? Mark a	<u>all</u> that apply:	
	•Copiers:		□ none □ laser printers	<ul> <li>photocopy machine</li> <li>carbonless copy paper</li> </ul>	□ mimeograph machine □ laminator	
	<ul> <li>Appliances:</li> </ul>		□ none □ refrigerator	<ul> <li>□ stove or oven</li> <li>□ washing machine</li> </ul>	□ lab burners □ microwave oven	
	Chemicals:		□ none □ lab chemicals	□ cleaning products □ biological specimens st	tored in chemicals	
23.	Are any of the fo	ollowing	items ever used in	this room? Mark all that a	apply:	
	<ul> <li>Paints/pens:</li> </ul>	□ neve □ oil/a	er crylic paints	<ul> <li>permanent markers or a</li> <li>whiteboard markers</li> </ul>	art pens	
	• Glues/fluids:	□ never □ rubber cement		□ correction fluid □ epoxy		
	• Air freshener:	_	er ging freshener	□ plug-in deodorizer □ spray can		
	• Candles:	□ neve □ unsc	er cented candles	□ scented candles □ incense		
	• Air Cleaner:	□ neve □ porta	er able air (filter) purifi	□ ozone or ion-generating ier	g air purifier	

24. Have you applied any of the following pesticides in this room this year? Mark all that apply:

Sprays:	□ never	in the past	□ currently
Powders:	□ never	□ in the past	□ currently
Traps:	□ never	□ in the past	□ currently

#### Section D. Observations & Impressions

25. Which is your classroom preference at your school? □ permanent □ portable □ no opinion

#### 26. Characterize each of the following as it applies to your room. Mark all that apply:

- often too cold
   often too humid

□ often too hot □ often too dry

- often too drafty
- y □ often too stale or stuffy

- □ too dim
   □ too bright
   □ glare from lights
   □ too much direct sun





## **TEACHER QUESTIONNAIRE**

27. Are there noises that generally disrupt teaching activities in this room? Mark <u>all</u> that apply:

	none ventilation (fan)	☐ lighting (buzz) ☐ next-room voices	□ other	
	none playground	☐ mower/blower ☐ traffic	□ aircraft □ other	
-	turn off the heater or ain $\Box$ rarely $\Box$ occasion	r conditioner in this roor ally □ frequently	n because of excessiv □ most of the time	
<ul> <li>Bugs (ants)</li> </ul>	•	I	n? <i>Mark <u>all</u> that apply</i> currently currently	/:
30. Indicate if yo	u have experienced an	y of the following odors	in this room. Mark of	ne for each:
_	<u>never</u> <u>so</u>	<u>metimes</u> <u>often</u>		
<ul> <li>Musty odor</li> </ul>				
<ul> <li>Cleaning p</li> <li>Bus/auto e</li> </ul>				
<ul> <li>New carpe</li> </ul>	_			
<ul> <li>Fresh paint</li> </ul>				
<ul> <li>Cooking or</li> </ul>				
Pesticides				
<ul> <li>Asphalt/tar</li> </ul>				
<ul> <li>Tobacco si</li> <li>Trash or di</li> </ul>	moke □ umpster odor □			
<ul> <li>Sewer/com</li> </ul>	•			
<ul> <li>Fire/smoke</li> </ul>				
		tivities during school ho	urs this year? <b>Mark a</b>	ll that apply:
- 14/1	never	_	□ don't know	
	your room □ same	-		loors 🗆 other
	,	0 ,	•	
● Type: □	] painting □ carper	try Dumbing	□ flooring □ roof	
32. Have you ob	served water leaks, floo	oding, water stains or vi	sible mold in this room	n? Mark <u>all</u> that apply:
<ul> <li>Leak or floor</li> </ul>	od: 🗆 never 🛛 in the	past	don't know	
• Type:	🗆 roof 🛛 🗆 windo	w □ sink/toilet over	flow 🗆 sprinkler 🗆	] plumbing 🛛 other
<ul> <li>Water stain</li> </ul>	ns: □ never □ in the	past	🗆 don't know	
• Where		, ,		I furniture 🛛 other
• \/icible.mol				
• Visible mol		. ,	□ don't know	]( i □athan
• Where	:: 🗆 walls 🗆 ceiling	□ window sills	□ carpet/rug/floor □	I furniture D other
33. How often ar	e the floors in this room	swept or vacuumed?		
□ daily	□ 2-3/week	□ wee	kly	
□ 1-2/month	$\Box$ less than 1	/month 🛛 don't	t know	
		<i>-</i>		
		-5-		



34. Do you feel the room receives adequate custodial services?  $\Box$  yes  $\Box$  no

- If not, what do you feel is needed? □ more frequent □ more effective □ both
- 35.To whom do teachers direct questions or complaints about temperature, odors, or hygiene in their rooms? *Mark <u>all</u> that apply*:
  - □ custodian □ principal/administrator □ IAQ coordinator
  - □ facility staff □ health & safety staff
- 36. How many times have you made complaints about such conditions in this room during this school year?
- 37. How would you generally characterize the overall environmental quality in this classroom? □ excellent □ good □ adequate □ poor □ very poor

#### Section E. Symptoms & Related Questions

- 38. Were you absent in the past two weeks?
  - □ no
     □ 1-2 days
     □ 3-5 days
     □ more than 5 days
     Chief cause:
     □ cold or flu
     □ asthma
     □ any other reason
     □ other respiratory
- 39. In the past two weeks, did you experience any of the following symptoms <u>at school</u>? Indicate if they continued or improved when you were home.

,		<u>At sc</u>	nooi	<u>At no</u>	ome
	none	occasional	frequent	same/worse	improves
<ul> <li>Nose (congestion, runny nose, dry nose)</li> </ul>					
<ul> <li>Throat (irritation, sore throat, dryness)</li> </ul>					
<ul> <li>Eyes (irritation, redness, watering, puffiness)</li> </ul>					
<ul> <li>Skin (dryness, flaking, rash, other irritation)</li> </ul>					
Headaches or sinus pain					
<ul> <li>Drowsiness or difficulty concentrating</li> </ul>					
Dizziness or faintness					
•Shortness of breath, wheeze, difficulty breathing					
Upset Stomach					

40. Do you have any of the following chronic medical conditions? Mark all that apply:

□ hypertension

- $\Box$  hay fever or other allergies  $\Box$  bronchitis  $\Box$  heart disease
- 🗆 asthma
  - If you have asthma, how often did you use inhaled asthma medication in the past two weeks?
  - □ never □ 1-2 times per week □ most days □ every day
- 41. How many students in your class currently take medication for asthma?

□ don't know □ none □ 1-2 □ 3-5 □ 6-10 □ 11+

- 42. Are you currently a smoker? □ yes □ no
- 43. Do you live with a smoker? □ yes □ no

# **California Portable Classrooms Study**

A joint project of the California Air Resources Board and Department of Health Services

California Environmental Protection Agency



Air Resources Board





April16, 2001

«Expr1»

«district» Attn: «distcontactname1» «distaddrline1» «distcity», «diststate» «distzip»

Dear «distcontactname1»:

We are writing to request your support for the California Portable Classrooms Study. The California Air Resources Board (ARB) and the California Department of Health Services (DHS) are conducting this study to learn more about the environmental health conditions in California's portable classrooms. The ARB and DHS have contracted with Research Triangle Institute (RTI) to assist in the study.

The California Portable Classrooms Study was requested by Governor Davis and mandated by the State Legislature, and is endorsed by the Superintendent of Public Instruction, Ms. Delaine Eastin. Per the California Health & Safety Code (Section 39619.6), the study must be completed by June 30, 2002, and a report provided to the Legislature, including "recommendations to remedy and prevent unhealthful conditions found in portable classrooms." These recommendations will help shape future programs and funding decisions at the State level.

Schools in your district have been randomly selected to participate in this study. The schools in your district listed on the following page will be contacted, and asked to participate in this study. In about a week, RTI will send a study package to the principal of each school listed on the attached page. The package will contain instructions and questionnaires for the school, and the principal will be asked to assign a "study coordinator" to organize and manage these activities. If you would like to review the study package and its contents, please go to the following Web site: <a href="http://www.rti.org/units/shsp/projects/cpcs.cfm">http://www.rti.org/units/shsp/projects/cpcs.cfm</a>. The survey has been designed to require minimal effort on the part of school staff.

Your district's participation is critical to the success of the study. We hope you will support this study in your school district, because, to be a valid study, we cannot substitute the schools to be sampled from your school district with other California schools. The information acquired from the participating schools and staff will remain strictly confidential; the names of individual schools and staff that participate will not be reported to our agencies or any other government agencies.

Page 2 April16, 2001

Enclosed is a postcard asking whom in your district should receive the study results for schools in your district. If you would like to receive the formaldehyde monitoring results from your district and a summary of the findings from the entire study please circle "yes" on the enclosed postcard and return it to RTI. After the survey, a subset of schools will also be asked to participate in more in-depth environmental testing for a one-day period sometime between August 2001 and March 2002. We hope that you will support this study. If you have any questions, please contact either of us (see phone numbers below) or Dr. Roy Whitmore, of RTI, at 1-800-334-8571, ext. 5809. It is only with the help of schools in your district that this research can be successful. Thank you for your time and consideration.

Peggy L. Jenkins

Peggy L. Jenkins ARB Project Officer (916) 445-0753

Jod Wellin

Jed Waldman DHS Project Officer (510) 540-2469

# **California Portable Classrooms Study**

A joint project of the California Air Resources Board and Department of Health Services

California Environmental Protection Agency



Air Resources Board





April 20, 2001

«school» «addrline1» «City», «State» «Zip»

Dear Principal:

We are writing to request your support of the California Portable Classrooms Study. The California Air Resources Board (ARB) and the California Department of Health Services (DHS) are conducting this study to learn more about the environmental health conditions in California's portable classrooms.

The California Portable Classrooms Study was requested by Governor Davis, mandated by the State Legislature, and endorsed by the Superintendent of Public Instruction, Ms. Delaine Eastin. Per the California Health & Safety Code (Section 39619.6), the study must be completed by June 30, 2002, and a report provided to the Legislature, including "recommendations to remedy and prevent unhealthful conditions found in portable classrooms." These recommendations will help shape future programs and funding decisions at the State level.

«school» has been randomly selected to participate in this study. We are writing in advance to encourage you and others at your school to participate in this very important study. The ARB and DHS have contracted with Research Triangle Institute (RTI) to administer this survey to the selected schools.

In about a week, RTI will send a package containing study materials directed to you. The package will contain instructions, questionnaires, a study brochure, and formaldehyde sampling tubes (not all schools will receive sampling tubes). You will be asked to assign one person from your school as a "study coordinator", who will be asked to follow instructions for selecting three classrooms and teachers to respond to the survey, place and collect the sampling tubes, and return the materials to RTI and the lab. Teachers will only be asked to complete a single questionnaire.

Your study coordinator may need assistance from your district's facility manager to complete the facility questionnaire. We encourage you to contact the district office if their assistance is needed. Information about the study has been provided to your district facility manager.

«id»

Page 2 April 20, 2001

Your school's participation is critical to the success of this study. For the results to be valid, we cannot substitute other schools for those currently selected. The responses and information provided by your school will remain <u>strictly confidential</u>; names of individual schools and school staff that participate will <u>not</u> be reported to any state agencies. Your superintendent will have the opportunity to receive the formaldehyde monitoring results for your school and a summary of the state-wide findings. A small percent of participating schools will be asked to participate in more in-depth environmental testing for a one-day period sometime between August 2001 and March 2002.

We hope that you will support this important study. If you have any questions, please contact either of us (see phone numbers below), or Dr. Roy Whitmore, of RTI, at 1-800-334-8571, ext. 5809. It is only with the help of individual schools, such as yours, that this research can be successful and provide results that are accurate and useful. Thank you for your assistance and support.

Sincerely,

Peggy L. Jenkins

Peggy L. Jenkins ARB Project Officer (916) 323-1504

Jed Wellen

Jed Waldman DHS Project Officer (510) 540-3427

Enclosure



#### հոհվիովիուհիսիսիսիսիսիսիսիսի

Dear School Superintendent,

Classroom monitoring results obtained during the California Portable Classrooms Study will be made available to participating school districts. Results for individual classrooms in your district will be provided, along with general information about our findings for all schools in the study. The results will only be provided to you or the person chosen below and not to anyone else, including other schools, the California Air Resources Board or the Department of Health Services. State agencies will only receive data and summary results without school and classroom identifiers attached.

Would you or the person indicated below like to receive the results from this study?

		e Yes or No	
Please provide the name and address below if someone other than yourself should receive the results.		YES	NO
School or District			
Contact Name (please print)			
Street Address			
City	_Zip Code		
Phone number and/or email			

Results will be mailed after the entire study has been conducted. Please feel free to share this information with schools in your district if you so desire. Thank you very much for your support of the California Portable Classrooms Study!

Dear School Superintendent,

Classroom monitoring results obtained during the California Portable Classrooms Study will be made available to participating school districts. Results for individual classrooms in your district will be provided, along with general information about our findings for all schools in the study. The results will only be provided to you or the person chosen below and not to anyone else, including other schools, the California Air Resources Board or the Department of Health Services. State agencies will only receive data and summary results without school and classroom identifiers attached.

Would you or the person indicated below like to receive the results from this study?

DI	······································	Please circle Yes or No
than yourself should r	ne and address below if someone other eceive the results.	YES NO
School or District		
Contact Name (please pr	int)	
Street Address		
City	Zip Coo	le
Phone number and/or en	nail	
	ter the entire study has been conducted. Please feel free ct if you so desire. Thank you very much for your support o	
[	BUSINESS REPLY MAIL	
	FIRST CLASS MAIL PERMIT NO. 593 DURHAM, N	c
	POSTAGE WILL BE PAID BY ADDRESSEE	

RESEARCH TRIANGLE INSTITUTE ATTN: Michael Phillips (08034.001) PO BOX 12194 RESEARCH TRIANGLE PARK, NC 27709-9985

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#### հորվիակիարկորիրորդություն

Dear Principal,

Thank you for participating in the California Portable Classrooms Study! Your participation will provide more accurate, state-wide results for environmental scientists analyzing the data. Please fill out and return this postcard or email your response to mjp@rti.org. If it is more convenient, please fill out the enclosed fax transmittal sheet with this information and fax to Michael Phillips, of RTI, at 919-541-7250. Please note: neither names of staff nor schools will be reported to any state agencies. Please provide the name and phone number of a school coordinator, or someone who can best help coordinate the study activities at your school. This information will only be used for recontact purposes.

Name of School (please print)	 		
Coordinator's name (please print)			
Coordinator's phone number	 	Best time to reach	am/pm
E-mail (if available)			

If you have any further questions about the study, please contact Michael Phillips at 1-800-334-8571, ext. 6276.

If you have questions about study oversight and participant rights, please contact Dr. Wendy Visscher, Chairperson of the RTI Committee on the Protection of Human Subjects, at 1-800-334-8571, ext. 6028.

#### Dear Principal,

Thank you for participating in the California Portable Classrooms Study! Your participation will provide more accurate, state-wide results for environmental scientists analyzing the data. Please fill out and return this postcard or email your response to mjp@rti.org. If it is more convenient, please fill out the enclosed fax transmittal sheet with this information and fax to Michael Phillips, of RTI, at 919-541-7250. Please note: neither names of staff nor schools will be reported to any state agencies. Please provide the name and phone number of a school coordinator, or someone who can best help coordinate the study activities at your school. This information will only be used for recontact purposes.

Name of School (please print) \_\_\_\_\_\_ Coordinator's name (please print) \_\_\_\_\_\_ Coordinator's phone number \_\_\_\_\_\_ - \_\_\_\_ - \_\_\_\_ Best time to reach \_\_\_\_\_\_am/pm

E-mail (if available)

If you have any further questions about the study, please contact Michael Phillips at 1-800-334-8571, ext. 6276.

If you have questions about study oversight and participant rights, please contact Dr. Wendy Visscher, Chairperson of the RTI Committee on the Protection of Human Subjects, at 1-800-334-8571, ext. 6028.



NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

#### BUSINESS REPLY MAIL

FIRST CLASS MAIL PERMIT NO. 593 DURHAM, NC

POSTAGE WILL BE PAID BY ADDRESSEE

RESEARCH TRIANGLE INSTITUTE ATTN: Michael Phillips (08034.001) PO BOX 12194 RESEARCH TRIANGLE PARK, NC 27709-9985

հոհվակակիսիկոիկոիսիսիսի

Dear Principal:

I am writing to ask for your help with the California Portable Classrooms Study. Research Triangle Institute (RTI) is conducting this study on behalf of the California Air Resources Board (ARB) and the California Department of Health Services (DHS) to learn more about the environmental health conditions in California's portable classrooms.

About a week ago, we sent you, and your district superintendent, a brief letter explaining the study. Enclosed are the study materials for your school. The packet includes questionnaires (for 3 teachers and the facility manager), self-sealing envelopes, postage-paid envelopes, and (for some schools) formaldehyde monitoring tubes.

As principal for your school, we would like to ask you to do two things:

- 1) Appoint a "study coordinator" to carry out this study in your school. The study coordinator will have 3 main responsibilities: select 3 classrooms/teachers to participate (according to enclosed instructions), distribute the study materials, and collect and return the study materials.
- 2) Please complete and return the enclosed postcard or fax the response on the enclosed fax transmittal sheet.

Because your school was selected using a randomized process to insure a representative sample of all California public schools, your school's participation is critical to the success of the study. RTI will keep all school information strictly confidential. Neither individual questionnaire responses nor specific results for any individual schools will be reported to any government agencies. Government agencies will receive data and summary results that exclude identifiers for individual participants, classrooms, and schools.

Classroom formaldehyde concentrations will be reported only to the district superintendent. If you would like to obtain a copy of these results for your school, please contact your superintendent's office after the study has been completed in June 2002.

If you have any questions about this study, please call Mr. Michael Phillips, of RTI, at 1-800-334-8571, ext. 6276. If you have questions about study oversight and participant rights, please contact Dr. Wendy Visscher, Chairperson of the RTI Committee on the Protection of Human Subjects, at 1-800-334-8571, ext. 6028.

It is only with the help of individual schools, such as yours, that this research can be successful and provide results that are accurate and useful. Thank you for your assistance and participation.

Michael Phillips

Michael Phillips RTI Survey Manager

Dear Teacher:

I am writing to ask for your help with the California Portable Classrooms Study. Research Triangle Institute (RTI) is conducting this study on behalf of the California Air Resources Board (ARB) and the California Department of Health Services (DHS) to learn more about the environmental health conditions in California's portable classrooms.

Your school has been chosen at random from a list of all California public schools. Three teachers in your school, including yourself, were systematically chosen to participate in this study based on classroom assignment. The results from the study will be used by the ARB, DHS, and other state agencies to assess the potential for adverse health conditions and to recommend effective actions that can be taken to remedy or prevent any unhealthful conditions that may be found.

## Please complete the "Teacher Questionnaire." It should take about 20 minutes. Then, return the questionnaire, sealed in the white envelope, to the study coordinator.

Your participation is voluntary. However, because your school and this classroom were selected using a randomized process to insure a representative sample of all California public school classrooms, your participation is critical to the success of the study. RTI will keep all school information strictly confidential. Neither individual questionnaire responses nor specific results for any individual schools will be reported to any government agencies. Government agencies will receive data and summary results that exclude identifiers for individual participants, classrooms, and schools.

Classroom formaldehyde concentrations will be reported only to the district superintendent. If you would like to obtain a copy of these results for your school, please contact your superintendent's office after the study has been completed in June 2002.

If you have any questions about this study, please call Mr. Michael Phillips, of RTI, at 1-800-334-8571, ext. 6276. If you have questions about study oversight and participant rights, please contact Dr. Wendy Visscher, Chairperson of the RTI Committee on the Protection of Human Subjects, at 1-800-334-8571, ext. 6028.

It is only with the help of individual schools, such as yours, that this research can be successful and provide results that are accurate and useful. Thank you for your assistance and participation.

Milar Phillips

Michael Phillips RTI Survey Manager

Dear Facility Manager:

I am writing to ask for your help with the California Portable Classrooms Study. Research Triangle Institute (RTI) is conducting this study on behalf of the California Air Resources Board (ARB) and the California Department of Health Services (DHS) to learn more about the environmental health conditions in California's portable classrooms.

Your school has been chosen at random from a list of all California public schools. You, individually, have been chosen to participate because you are the facility manager or play an important role in facility oversight at your school. The results from the study will be used by the ARB, DHS, and other state agencies to assess the potential for adverse health conditions and to recommend effective actions that can be taken to remedy or prevent any unhealthful conditions that may be found.

#### Please complete the "Facility Manager Questionnaire." It should take about 40 minutes. Then, return the questionnaire, sealed in the white envelope, to the study coordinator.

In addition, we are asking that you assist the study coordinator (whom your principal has already assigned). This may include aiding the coordinator in utilizing the school site plan to identify sample classrooms and/or placing and retrieving the formaldehyde sampling tubes in classrooms.

Your participation is voluntary. However, because your school and the sample classrooms were selected using a randomized process to insure a representative sample of all California public school classrooms, your participation is critical to the success of the study. RTI will keep all school information strictly confidential. Neither individual questionnaire responses nor specific results for any individual schools will be reported to any government agencies. Government agencies will receive data and summary results that exclude identifiers for individual participants, classrooms, and schools.

Classroom formaldehyde concentrations will be reported only to the district superintendent. If you would like to obtain a copy of these results for your school, please contact your superintendent's office after the study has been completed in June 2002.

If you have any questions about this study, please call Mr. Michael Phillips, of RTI, at 1-800-334-8571, ext. 6276. If you have questions about study oversight and participant rights, please contact Dr. Wendy Visscher, Chairperson of the RTI Committee on the Protection of Human Subjects, at 1-800-334-8571, ext. 6028.

It is only with the help of individual schools, such as yours, that this research can be successful and provide results that are accurate and useful. Thank you for your assistance and participation.

Milar Phillips

Michael Phillips RTI Survey Manager

Dear Study Coordinator:

Thank you for serving as the study coordinator for your school for the California Portable Classrooms Study! Research Triangle Institute (RTI) is conducting this study on behalf of the California Air Resources Board (ARB) and the California Department of Health Services (DHS) to learn more about the environmental health conditions in California's portable classrooms.

Your school has been chosen at random from a list of all California public schools. The results from the study will be used by the ARB, DHS, and other state agencies to assess the potential for adverse health conditions and to recommend effective actions that can be taken to remedy or prevent any unhealthful conditions that may be found.

Please review and follow these steps:

- 1) Read the Study Coordinator Checklist. This one page checklist provides guidelines to completing responsibilities in a desired order.
- 2) Select 3 study classrooms and the associated teachers to participate : Please use the enclosed instructions (and your school site plan) to select three classrooms and the associated teachers to complete the "Teacher Questionnaire."
- 3) Distribute the Study Materials: Please give the enclosed questionnaires (three teacher questionnaires and one facility manager questionnaire) to the selected teachers and facility manager at your school. In addition, if formaldehyde tubes are included in your school's box, please have them placed in each of the three selected classrooms for 10 days using the enclosed instructions. You may want to utilize the assistance of your school's facility manager for this task.
- 4) Collect and Return the Completed Study Materials: Please collect the completed teacher and facility manager questionnaires (in sealed envelopes), and return them in the enclosed postage-paid envelope to RTI. In addition, please ship the formaldehyde tubes to the lab in the enclosed postage-paid envelope.

Because your school was selected using a randomized process to insure a representative sample of all California public schools, your school's participation is critical to the success of the study. RTI will keep all school information strictly confidential. Neither individual questionnaire responses nor specific results for any individual schools will be reported to any government agencies. Government agencies will receive data and summary results that exclude identifiers for individual participants, classrooms, and schools. Classroom formaldehyde concentrations will be reported only to the district superintendent. If you would like to obtain a copy of these results for your school, please contact your superintendent's office after the study has been completed in June 2002.

If you have any questions about this study, please call Mr. Michael Phillips, of RTI, at 1-800-334-8571. If you have questions about study oversight and participant rights, please contact Dr. Wendy Visscher, Chairperson of the RTI Committee on the Protection of Human Subjects, at 1-800-334-8571, ext. 6028.

It is only with the help of individual schools, such as yours, that this research can be successful and provide results that are accurate and useful. Thank you for your assistance and participation.

Michael Phillips

Michael Phillips RTI Survey Manager

#### INSTRUCTIONS FOR SELECTING SAMPLE CLASSROOMS For "SCHOOL NAME" "SCHOOL ID"

#### **Overview**

We need you to help us pick classrooms and teachers for our study. These instructions will guide you through making a list of your portable classrooms and a list of your traditional classrooms from which you will randomly select two portable classrooms and one traditional classroom (unless you have only one portable classroom). Because we need to select classrooms at random, it is important that you follow these instructions carefully and thoroughly. You will need first to gather a few basic **Materials**. You will then follow the numbered instructions in the **Selection Procedure** section below, referring to the **Example** on page 4 and the **Tables** beginning on page 5, as needed.

#### **Materials**

- Map of your school showing all the classrooms, or a list of all the classrooms
- Red and green pencils, included in the coordinator package with these instructions
- Tables on pages 5-8 of this document *Table 1: Classroom Selection* and *Table 2: Classroom Sample*.

#### **Selection Procedure**

1. Obtain a school map that shows the physical locations of all **classrooms** (traditional and portable) used by your school. Or, if a map is not readily available, obtain a list of all classrooms.

A **classroom** is *any* room used for classroom instruction *for grades K-12*, including specialpurpose rooms such as art, shop, band, and lab rooms. Include libraries that have staff assigned to them. Also include classrooms at your facility used by the County Education Office.

2. Does your school have **portable classrooms**?

A **portable classroom** is a classroom in a building that is designed and constructed to be relocatable and transportable over public streets.

*If your school has no portable classrooms*, please initial here (\_\_\_\_\_) and return the entire package to RTI using the return envelope provided because your school is not eligible to participate in this study. Otherwise, please continue.

3. On the school map (or list), number the portable classrooms with the red pencil, starting at 1. Number all other classrooms (the **traditional classrooms**) with the green pencil, starting at 1.

A **traditional classroom** is any room used for classroom instruction that is not a portable classroom.

You do not have to number the classrooms in any particular order. The important point is that all classrooms are numbered and that the numbering provides a count of classrooms.

4. Each classroom should now have a red or a green classroom number assigned to it. Please check to make sure this is the case; then enter the total numbers of portable and traditional classrooms in the table below.

Total Number of Classrooms			
Portable (red)	Traditional (green)		

If your school has more portable or traditional classrooms than shown in Table 1 on pages 5-7, call Mr. Michael Phillips at Research Triangle Institute at 1-800-334-8571, Ext. 6276, before proceeding with Step 5.

- 5. Select sample classrooms as follows:
  - 5.1. There are two tables beginning on page 5: Table 1 (Classroom Selection) and Table 2 (Classroom Sample). On Table 1, circle the number in the first column that corresponds to the total number of **portable classrooms**. As shown in the example below, if your school has 10 portable classrooms, the relevant section of the table would look like this:

Total Number of Classrooms	First ID	Second ID
8	3	5
9	7	2
(10)	4	7
H H	2	5
12	8	11

5.2. Proceed across the row of the number you circled, and copy the *First ID* into the middle column of Table 2 (Classroom Sample) on page 8. This *First ID* corresponds to a red classroom number on the school map. Write the room number (or name) of this classroom in the last column of Table 2. See the Example on page 4.

In our example, the *First ID* in Table 1 is 4. If it corresponds to the room Annex 25, then you would write *Annex 25* in the last column of Table 2. At this point, Table 2 would look like this:

#### Table 2: CLASSROOM SAMPLE For the Example School

Classroom Code	ID Number	<b>Room Number/Name</b> <sup>a</sup>
Pre-printed code ending in A	4	Annex 25
Pre-printed code ending in B		
Pre-printed code ending in C		

<sup>a</sup>The number or name on the classroom door.

In our example, you would enter a 7 under the 4 above. Classroom 7 on the map might be *Annex* 28. See the Example on page 4.

<sup>5.3.</sup> *If your school has more than one portable classroom,* repeat this process using the *Second ID* in the same row from Table 1. Enter the *Second ID* Number in the middle column of Table 2 (classroom sample). This *ID* corresponds to a red classroom number on the school map. Write the room number (or name) of this classroom in the last column of Table 2.

5.4. On Table 1 on page 5, circle the number in the first column that corresponds to the total number of **traditional classrooms**. In a school with 50 traditional classrooms, the relevant portion of the table would look like this:

Total Number of		
Classrooms	First ID	Second ID
48	26	24
49	40	15
(50)	38	9
51	12	33
52	35	29

5.5. Proceed across the row of the number you circled, and copy the *First ID* into the middle column of Table 2 (classroom sample). (In our example, this would be 38.) This *First ID* corresponds to a green classroom number on the school map. Write the room number (or name) of this classroom in the last column of Table 2. See the Example on page 4.

If ID number 38 in our example corresponds to the staffed library of the school, which does not have a room number but which the school calls a Media Center, your completed Table 2 would look like this:

#### Table 2: CLASSROOM SAMPLE For the Example School

Classroom Code	ID Number	<b>Room Number/Name</b> <sup>a</sup>
Pre-printed code ending in A	4	Annex 25
Pre-printed code ending in B	7	Annex 28
Pre-printed code ending in C	38	Media Center

<sup>a</sup>The number or name on the classroom door.

- 5.6. *If your school has only one portable classroom*, you will at this point have filled out only two rows of Table 2. To complete the third and final row, repeat Step 5.5 using the *Second ID* from the third column of Table 1. (In our example, this would be 9.) Enter that ID number in the middle column of Table 2. This *ID* corresponds to a green classroom number on the school map. Write the room number (or name) of this classroom in the last column of Table 2.
- 5.7. You should now have completed all three rows of Table 2 (classroom sample). The sample classroom numbers appear in the last column of this table. The study code numbers for these three classrooms are listed in the first column. The first classroom code number ends in A, the second in B, and the third in C. If your school has two or more portable classrooms, your sample should consist of two portable classrooms and one traditional classroom. Otherwise, your sample should consist of one portable classroom and two traditional classrooms.
- 6. *Select the sample teacher for each sample classroom*. The sample teacher for each sample classroom is the teacher who uses the classroom the most. If two or more teachers use the classroom for equal amounts of time, select the teacher who will have the next birthday.

Please mail this completed form to RTI along with the school map with the red and green classroom ID numbers and the completed teacher and facility manager questionnaires.

### EXAMPLE

#### **TABLE 1: CLASSROOM SELECTION**

First ID	Second ID	
3	5	
7	2	
(4)	(7)	
2	5	
8	11	

#### TABLE 1: CLASSROOM SELECTION

Total Number of Classrooms	First ID	Second ID
48	26	24
49	40	15
(50)	(38)	9
51	12 /	33
52	35	<u></u>

### TABLE 2: CLASSROOM SAMPLE

Classroom Code	ID Number	Room Number/Name <sup>a</sup>
Pre-printed code ending in A	4	Annex 25
Pre-printed code ending in B	7	Annex 28
Pre-printed code ending in C	38	Media Center

<sup>a</sup>The number or name on the classroom door.

#### Instructions for Use of Formaldehyde Sampling Tubes

Note: Please follow these instructions immediately after all sample classrooms have been selected. If your Spring/Easter break is next week, please wait until after the break to deploy the formaldehyde sampling tubes.

- 1. Remove all materials from the envelope labeled "formaldehyde." The envelope should contain:
  - A. 3 or 4 formaldehyde sampling tubes in cardboard box(es). Save the cardboard box(es) for mailing the tubes to the lab. Please don't take the end caps off the tubes yet.
  - B. 3 or 4 mounting pins.
  - C. 3 or 4 labels with code numbers.
  - D. A TyVec mailing envelope pre-addressed to AIR QUALITY RESEARCH, INC.
  - E. An Analysis Request Form.
- 2. You should have the same number of labels as sampling tubes. Take the tubes out of the cardboard boxes and remove the plastic wrapping. Adhere one label to each sampling tube (**but not over other label**). The sampling tube will be deployed in the classroom whose code number ends with the same letter as the code number on the sampling tube. For example, the tube(s) whose code number ends in A will be placed in the classroom whose code number also ends in A. If the code number on a tube ends in X, it can be deployed in any of the sample classrooms A, B, or C, but the end cap on this tube should <u>never</u> be removed for any reason whatsoever. The "X" tube is called a field blank.
- 3. Deploy the formaldehyde sampling tubes in the selected sample classrooms, carefully following the instructions below.
  - A. Unwrap the ribbon on the tube.
  - B. Stick the pushpin through the ribbon and attach to the classroom's ceiling. Please see that the sampling tube is at least 2 ft. from any wall and is not subject to strong drafts from windows, outdoors, or air vents. The tube should hang about a foot below the ceiling.
  - C. For tubes whose code numbers end in A, B, or C, hang the tube in the classroom whose code number ends in the same letter. If two tubes have code numbers that end with the same letter, hang those two tubes about 6 inches apart in the classroom whose code number ends with the same letter. Take the yellow cap off the end of each sampling tube, and place it on the opposite end of the tube. The open end of the sampling tube should hang down.
  - D. If you have a tube whose code number ends with an X, hang the tube about 6 inches from another tube in classroom A, B, or C, but DO NOT REMOVE THE END CAP FROM THE TUBE WHOSE ID NUMBER ENDS IN X. The cap should remain on this tube for the entire sampling period.
  - E. Fill out the Analysis Request Form. Enter the start date and time for each sampling tube.
- 4. Tubes should be left hanging and undisturbed for 10 days. Make a note to remind yourself of the day the tubes are to be taken down. If the 10<sup>th</sup> day lies on a weekend or holiday, please take the formaldehyde tube down the Friday before the weekend or holiday.
- 5. On the scheduled day, take the tubes down and cap them tightly. Record the date and stop time on the Analysis Request Form.
- 6. Place the tubes in the cardboard box(es) that they originally came in. Place them and the Analysis Request Form in the TyVec envelope addressed to AIR QUALITY RESEARCH, INC. Mail the envelope(s).
- 7. Thank you very much!

## **Coordinator Checklist**

## For those schools with Formaldehyde Tubes

Complete	Description of Each Step	
	<ol> <li>Read the letter addressed to the Study Coordinator in the envelope labeled "Study Coordinator." It provides you with background information about the study and provides general instructions for your tasks.</li> </ol>	
	<ol> <li>Read the Instructions for Selecting Sample Classrooms, which you will find in the same envelope. Then, following those instructions, select three sample classrooms.</li> </ol>	
	3. Read the Instructions for Use of Formaldehyde Sampling Tubes, which is also in the same envelope. Then, following those instructions, have the facility manager or other appropriate person help you deploy the formaldehyde monitoring tubes in the sample classrooms. Be sure to record the start date and time for each tube on the Analysis Report Form found in the Study Coordinator envelope. If your Spring/Easter break is next week, please wait until after the break to deploy the formaldehyde monitoring tubes and to distribute the questionnaires. This request is being made because it is assumed there will be no school staff and children around during the Spring break.	
	4. Pull the Facilities Questionnaire from the envelope labeled "Facility Manager." In Item #7, on page 2, enter the total numbers of portable and traditional classrooms at your school. In the header of Section C, on page 5, enter the number/name for each of the three sample classrooms. Then, put the questionnaire back in the envelope and give it to your facility manager. Ask him/her to read the enclosed letter, complete the enclosed questionnaire, seal it in the self-sealing envelope provided (to keep his/her answers confidential), and return the completed questionnaire to you.	
	5. Find the envelopes labeled Classroom A, Classroom B, and Classroom C. Enter in the Section B header (page 2) of the questionnaire in the Classroom A envelope, the room number/name for the sample classroom whose code number ends in A. Then, put the questionnaire back in the envelope and give it to the teacher selected for the sample classroom whose code number ends in A. Similarly, enter in the Section B headers of the questionnaires in the Classroom B and C envelopes, the room number/name for the sample classrooms whose code numbers end in B and C. Then, put the questionnaires back in the envelopes and give them to the teachers selected for the sample classrooms whose code numbers end in B and C. Then, put the questionnaires back in the envelopes and give them to the teachers selected for the sample classrooms whose code numbers ends in B and C. Ask each teacher to read the enclosed letter, complete the enclosed questionnaire, seal it in the self-sealing envelope provided (to keep their answers confidential), and return the sealed envelope to you.	
	6. Collect the sealed envelopes from the three teachers and the facility manager. Place the sealed envelopes, 'Instructions for Selecting Sample Classrooms," and the school map (with the red and green classroom numbers) in the return envelope addressed to RTI, and mail it.	
	7. Allow the monitoring tubes to hang undisturbed for 8 to10 days, per the Instructions for Use of Formaldehyde Sampling Tubes. Take the tubes down, cap the tubes, and replace them in their original package(s). Write down the stop date and time on the Analysis Request Form.	
	8. Place the Analysis Request Form and tubes collected from all classrooms in the pre-addressed envelope to AIR QUALITY RESEARCH, INC, and mail it.	
	9. You are finished! Thank you for your time and assistance coordinating the California Portable Classrooms Study at your school.	

## **Study Coordinator Checklist**

Thank you, study coordinator, for managing the responsibilities associated with this study! *Please use the following checklist to do your tasks in the proper order.* 

CHECK BOX		Description of Each Step
	1.	Read the letter addressed to the "Study Coordinator". This provides background information about the study and provides general instructions for the tasks associated with being the study coordinator. There is no need to distribute any materials to anyone else yet.
	2.	Find the Instructions for Selecting Sample Classrooms, and please read it next.
	3.	Follow the Instructions for Selecting Sample Classrooms to select three sample classrooms, and the teacher who is to be the respondent for each classroom.
	4.	Pull the Facilities Questionnaire from the envelop labeled "Facility Manager." Enter the total numbers of portable and traditional classrooms, in Item #7 (page 2) of the Facilities Questionnaire. Also, enter the sample classroom numbers in the header of Section C (page 5) of the Facilities Questionnaire. Then, put the questionnaire back in the envelope and give it to your facility manager. Ask him/her to read the enclosed letter, complete the enclosed questionnaire, seal it in the self-sealing envelope provided (to keep his/her answers confidential), and return the sealed envelope to you.
	5.	Find the envelopes labeled Classroom A, Classroom B, and Classroom C. Enter in the Section B header (page 2) of the questionnaire in the Classroom A envelope, the room number/name for the sample classroom whose code number ends in A. Then, put the questionnaire back in the envelope and give it to the teacher selected for the sample classroom whose code number ends in A. Similarly, enter in the Section B headers of the questionnaires in the Classroom B and C envelopes, the room number/name for the sample classrooms whose code numbers end in B and C. Then, put the questionnaires back in the envelopes and give them to the teachers selected for the sample classrooms whose code numbers end in B and C. Then, put the questionnaires back in the envelopes and give them to the teacher to read the enclosed letter, complete the enclosed questionnaire, seal it in the self-sealing envelope provided (to keep their answers confidential), and return the sealed envelope to you.
	6.	Collect the completed questionnaires (in self-sealing envelopes) from the three teachers and the facility manager. Place the completed questionnaires, "Instructions for Selecting Sample Classrooms," and the school map (with red and green classrooms identified) in the return envelope addressed to RTI and mail. You are finished!
	7.	You are finished! Thank you for your time and assistance coordinating the California Portable Classrooms Study at your school.

#### What Will Happen to These Data Once They Are Collected?

At RTI, the questionnaire and environmental data will be entered into a computer database and analyzed. Before State agencies receive the results from RTI, individual names and all other school and classroom identifiers will be removed. The study results will then be used by State researchers to develop a report on the system-wide status of environmental conditions in California public schools. With input from interested stakeholders, the State researchers will also recommend actions that can be taken to remedy and/or prevent unhealthful environmental conditions in portable classrooms.

# Hen Will the Study Results Be Available?

The Legislature has required that ARB and DHS finish the study and submit their report by June 30, 2002. You can sign up on our LISTSERV at: www.arb.ca.gov/research/indoor/pcs/ pcs.htm

for regular updates on study progress.

You can find study updates at the California Portable Classrooms Study Web site:

www.arb.ca.gov/research/indoor/pcs/ pcs.htm

#### Whom May I Call If I Have Further Questions?

If you have any questions or comments regarding any aspect of this study, please call:

- Mr. Michael Phillips, RTI Survey Manager, at 800-334-8571, ext. 6276
- Ms. Peggy Jenkins, California Air Resources Board, at 916-445-0753
- Dr. Jed Waldman, California Department of Health Services, at 510-540-2469

E-mail should be sent to CAPCS@arb.ca.gov

Additional resources on Healthy Schools can be found at:

U.S. EPA IAQ Tools for Schools: www.epa.gov/iaq/schools/ tools4s2.html

Collaborative for High Performance Schools: www.chps.net

Please feel free to copy this brochure and distribute it to others at your school.

Questions about the California Portable Classrooms Study



Sponsored by California Air Resources Board (ARB) and California Department of Health Services (DHS)



Conducted by Research Triangle Institute Research Triangle Park, NC 27709

#### What Is the California Portable Classrooms Study?

This is a statewide study to learn more about environmental health conditions in California's portable classrooms. The State Air Resources Board (ARB) and the Department of Health Services (DHS) are jointly conducting the study. Study scientists will identify how widespread any potential problems may be, and make recommendations, in consultation with stakeholders, for actions that can be taken to solve any problems identified and prevent future problems.

### Why Is This Study Being Conducted?

The California Portable Classrooms Study was proposed by Governor Gray Davis and is supported by the California State Legislature. Delaine Eastin, State Superintendent of Public Instruction, has endorsed the study.

# How Was Our School Selected?

Your school is one of 1000 schools randomly chosen from all public schools in the State.

#### Why Is It So Important That Our School Participates?

Because the study uses a representative, statewide sample of schools, every school selected in the sample is important. Because your school was one of those randomly selected, we cannot replace it with another. If your school does not participate, study results will be less representative of statewide conditions.

#### How Will Portable Classrooms Be Studied?

There are two main components to the California Portable Classrooms Study. The first is a mail survey of 1000 schools, which will collect information from facility managers and teachers. In addition, air sampling for formaldehyde will be conducted in some schools. Several months after the mail survey, 60 schools will be recruited for more extensive environmental monitoring of their classrooms. In addition to portable classrooms, the study will include some traditional classrooms.

#### Will Much Effort Be Required by School Staff?

At each school, a "study coordinator" will receive a packet with instructions for selecting three classrooms, giving out questionnaires, placing formaldehyde monitoring tubes, and mailing these items back. The questionnaires for facility managers and teachers typically take about 20 minutes to complete. In the second part of the study in the fall, air samples and other environmental measurements will be taken by study scientists in several classrooms in each of the 60 schools selected for further environmental monitoring.

#### Are There Other Reasons Our School Should Participate?

Participating in this study offers you the opportunity to contribute to knowledge needed to promote healthier environmental conditions for school children in California. The results of this study will help shape future programs and funding decisions at the State level.

#### How Will Information I Provide Be Kept Confidential?

Research Triangle Institute (RTI) has been hired by the State to conduct the study, and they are required to keep all study information they receive **confidential**. Researchers will use the information you provide for statistical purposes only. Individual participant and school names will not be shared with any government agencies. Specific formaldehyde monitoring results for your school will only be provided to your school district superintendent.

## Preparing School Packets for Wave 1 of the California Portable Classrooms Study 08034.001

One medium/large Fed Ex box per school. Each box contains 5 white envelopes. Add contents to each white envelope as specified below.

#### Teacher (A-C) Materials each school receives Teacher A, B, and C

Teacher Cover letter 1 pg.
 Teacher Questionnaire (match ID)
 #2 pencil
 yellow postcard

Facility Manager's Materials each school receives contents below Facility Manager Cover Letter 1pg. Facilities Questionnaire (match ID) 1 #2 pencil

1 yellow postcard

#### Study Coordinator's Materials (w/ Formaldehyde) 480 schools

Lght orange Study Coordinator Checklist (w/ formaldehyde) 1pg. Study Coordinator Cover 1 pg. Classroom Selection Instructions 9 pgs. (match ID) 1 Formaldehyde Instructions 1 pg. 1 Analysis Request Form (match ID) 3-4 Formaldehyde Labels (match ID) 1 #2 pencil 1 green colored pencil 1 red colored pencil 1 yellow postcard 1 brochure

#### Study Coordinator's Materials (without Formaldehyde) 120 schools

Beige Study Coordinator Checklist (without formaldehyde) 1 pg.
Study Coordinator Cover 1 pg.
Classroom Selection Instructions 9 pgs. (match ID)
1 #2 pencil
1 green colored pencil
1 red colored pencil
1 yellow postcard
1 brochure

#### Loose materials in each box:

#### Principal's Materials (paper clip all together) (applies to all schools)

Blue postcard (**match ID**) Principal cover letter 1 pg. Fax transmittal sheet 1 pg.

#### Misc.

Formaldehyde tubes 3 packs 264 schools (school specific) Formaldehyde tubes 3 packs + 1 pack (4 total) 216 schools (school specific) AQR (white) envelope 480 schools (for every school that receives formaldehyde tubes) Return (yellow clasp) envelope all schools

## **California Portable Classrooms Study**

A joint project of the California Air Resources Board and Department of Health Services



#### Dear Principal,

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Thank you for your support of the California Portable Classrooms Study. You should have received your study materials one week ago. Please complete and return the blue postcard or fax transmittal sheet at your convenience. Your school's participation is very important to the overall success of this environmental study. If you have any questions, please call me at 1-800-334-8571, extension 6276.

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Regards, Michael Phillips

California Portable Classrooms Study Research Triangle Institute Attn: Michael Phillips PO Box 12194 Research Triangle Park, NC 27709-2194 California Portable Classrooms Study Research Triangle Institute Attn: Michael Phillips PO Box 12194 Research Triangle Park, NC 27709-2194

## **California Portable Classrooms Study**

A joint project of the California Air Resources Board and Department of Health Services







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Dear Principal,

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Regards, Michael Phillips

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# **California Portable Classrooms Study**

A joint project of the California Air Resources Board and Department of Health Services

California Environmental Protection Agency



Air Resources Board





May 18, 2001

«school» «addrline1» «City», «State» «Zip»

Dear Principal:

In the past month, you should have received a Federal Express package containing the study materials for the California Portable Classrooms Study. If you have completed these materials, we thank you for your participation in this important study. If not, we ask that you hang the formaldehyde tubes (if you received them) by June 5 and return them and the questionnaires by June 15, 2001.

It is important that all selected schools from all regions of the state participate in this landmark study. *This study has been mandated by the California Legislature*. It will be used to assess environmental health conditions in California's portable classrooms and to make recommendations to the Legislature to remedy and prevent any unhealthful conditions found. A random sample of 1,000 schools has been selected to include all types of portable schools across California. A large portion of these sample schools need to participate in order to obtain the best information possible for future policy and funding decisions.

We understand that your school is very busy with testing and end-of-year activities at this time, so we have attempted to design the study to minimize the time required for participation. School district offices have been informed of this study, and many are providing district staff, such as the facility manager or risk manager, to help schools participate in this study because of its importance. If you need assistance in order to participate in this study, please contact your district office. In addition, the State Agencies responsible for implementing this study, the Air Resources Board and the Department of Health Services, may be able to provide direct assistance to some schools. If you would like to request their assistance or discuss the study with them, please call me at the number listed below.

The questionnaire responses and formaldehyde measurement results from individual schools will be kept strictly confidential. No names of schools or participants will be reported to any government agencies. However, superintendents can obtain the formaldehyde data for schools in their districts at the conclusion of the study in June 2002.

If you never received the study materials, need a replacement package, or have any questions about the study, please contact me at the number listed below. Only with the help of individual schools, such as yours, will this research provide results that are a reliable basis for policy decisions. Thank you for your assistance and support.

Sincerely,

Michael Phillips

Michael Phillips Survey Manager, California Portable Classrooms Study 1-800-334-8571, ext. 6276, Eastern Daylight Time Zone

cc: Facility Manager

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