

and statistical analyses. This proposed canister-testing protocol measures the performance effects on canisters of the following three factors: Depth, exercise level (*i.e.*, ventilation rate), and water temperature. Depth is the maximum depth at which a diver would use the CO<sub>2</sub>-sorbent material, which for this proposed amendment is 130 fsw. For the other variables, OSHA has selected three combinations of ventilation rates and CO<sub>2</sub>-injection rates from the NEDU protocol to simulate three diverse levels of exercise (light, moderate, and heavy). The four water temperatures used in the proposed protocol are 40, 50, 70, and 90 degrees F (4.4, 10.0, 21.1, and 32.2 degrees C, respectively); these temperatures represent the wide range of water temperatures that recreational diving instructors and diving guides are likely to encounter.

For this application, the Agency has revised the NEDU protocol slightly by: Limiting the maximum depth to 130 fsw; requiring an O<sub>2</sub> fraction of 0.28 in the nitrox breathing-gas mixture (this fraction being the maximum O<sub>2</sub> concentration permitted at this depth by this proposal); providing tolerance limits for water temperatures; and defining canister duration as the time taken to reach 0.005 ATA of CO<sub>2</sub> (0.005 ATA of CO<sub>2</sub> is the level specified in this proposal as the maximum allowable amount of CO<sub>2</sub> in the breathing gas). In addition, the proposed protocol expressly prohibits the use of CO<sub>2</sub>-sorbent replacement schedules based on extrapolation of the protocol results. NEDU's statistical procedures (see Section III below, Reference (4)) do not provide a method for extrapolating the duration of CO<sub>2</sub>-sorbent materials beyond the results obtained during the canister-testing trials. Accordingly, the proposed canister-testing protocol provides improved validity and reliability of canister-replacement schedules, and will enable employers to replace CO<sub>2</sub>-sorbent materials in a timely manner.

### III. References

The preamble to this proposal cites the following references:

(1) National Oceanic and Atmospheric Administration (2001). NOAA Diving Manual: Diving for Science and Technology. Joiner, J. T. (ed.). Best Publishing Co., Flagstaff, AZ. (Ex. 3–12.)

(2) Diving Science and Technology (1995). "Analysis of Proposed Oxygen Exposure Limits for DSAT Oxygen Exposure Table Against Existing Database of Manned Oxygen Test Dives." Enriched Air Operations and Resource Guide. International PADI,

Inc., Rancho Santa Margarita, California. (Ex. 3–13.)

(3) R. W. Hamilton, R. E. Rogers, M. R. Powell, and R. D. Vann (1994). "Development and Validation of No-Stop Decompression Procedures for Recreational Diving: The DSAT Recreational Dive Planner." Hamilton Research, Ltd., Tarrytown, New York. (Ex. 3–14.)

(4) J. R. Clarke. "Statistically Based CO<sub>2</sub> Canister Duration Limits for Closed-Circuit Underwater Breathing Apparatus." U.S. Navy Experimental Diving Unit, Report 2–99, 1999. (Ex. 2–9.)

Copies of these references are available from the OSHA's Docket Office, Room N–2625, U.S. Department of Labor, 200 Constitution Avenue, NW., Washington, DC 20210; telephone (202) 693–2350 or fax (202) 693–1648.

### IV. Legal Considerations

Employers covered by this proposal currently are covered by OSHA's Commercial Diving Operations (CDO) standards at 29 CFR 1910, subpart T. The requirements of these standards are protecting their employees from significant risk. In issuing the variance from this standard, the Agency determined that the practices and protections in the variance would provide recreational diving instructors and diving guides with comparable protection to that provided by the CDO standards. The present proposal would extend these alternative protections to all such instructors and guides. In this regard, the proposed amendment would not replace existing requirements, but instead would be a limited alternative to them. Therefore, OSHA finds that the proposed amendment would not directly increase or decrease the protection afforded to employees, nor would it increase employers' compliance burdens. As demonstrated in the following sections, the proposed revision likely would reduce employers' compliance burdens by eliminating the requirement to have a decompression chamber at the dive site when they comply with the conditions specified in the proposed amendment.

### V. Preliminary Economic Analysis and Regulatory Flexibility Certification

The proposed amendment is not a significant rulemaking under Executive Order 12866, or a "major rule" under the Unfunded Mandates Reform Act or Section 801 of the Small Business Regulatory Enforcement Fairness Act (SBREFA). The proposal would impose no additional costs on any private or public sector entity, and does not meet any of the criteria for a significant or

major rule specified by the Executive Order or relevant statutes.

OSHA believes that the proposed amendment likely would offer employers of recreational diving instructors and diving guides an opportunity to expand these services into nitrox diving operations by eliminating costs associated with purchasing and maintaining a decompression chamber at the dive site when they comply with the conditions specified in the proposed amendment. By providing regulatory flexibility to these employers, the proposal may reduce their costs and increase productive time. Therefore, the Agency concludes that the proposed amendment would not impose any additional costs on these employers; consequently, the proposal requires no preliminary economic analysis. Furthermore, because the proposal imposes no costs on employers, OSHA certifies that it would not have a significant impact on a substantial number of small businesses; accordingly, the Agency need not prepare an initial regulatory flexibility analysis.

### VI. Paperwork Reduction Act

After a thorough analysis of the proposal, OSHA believes that it contains the following two collection-of-information (*i.e.*, paperwork) requirements: Conditions 9(b)(i) and 9(b)(ii) of proposed Appendix C. Condition 9(b)(i) requires employers to ensure that the diving log conforms to the requirements specified by paragraph (d) ("Record of dive") of § 1910.423, while Condition 9(b)(ii) specifies that employers must keep a record of the dive in accordance with § 1910.440 ("Recordkeeping requirements"). However, these paperwork requirements already apply to these employers under subpart T, regardless of this proposal, because their divers are using a mixed (*i.e.*, nitrox) gas breathing supply. The regulatory alternative in this proposed rulemaking only exempts the covered employers from having to maintain decompression chambers at the dive site, and does not exempt them from the other provisions of subpart T that apply to mixed-gas diving operations. Accordingly, the Agency already incorporates the time and cost burdens associated with these two paperwork requirements under Control No. 1218–0069.

Interested parties who wish to comment on OSHA's determination that this proposal contains no additional paperwork requirements must send their written comments to the Office of Information and Regulatory Affairs,