DoDEA Administrative Instruction 1302.01
Chemical Hygiene Program in Science Laboratories and Classrooms

Originating Division: Curriculum and Instruction

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Director, Department of Defense Education Activity Memorandum SY18-19-80, “Chemical Hygiene for Middle/High School Science Laboratories,” June 6, 2019

Approved by: Thomas M. Brady, Director

Purpose: This Issuance establishes policy, assigns responsibilities, and implements procedures for the Department of Defense Education Activity (DoDEA) Chemical Hygiene Program (CHP) in Science Laboratories and Classrooms. The purpose of the DoDEA CHP is to ensure all DoDEA school staff and students are protected from the health hazards of the chemicals used in science laboratories and classrooms.
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SECTION 1: GENERAL ISSUANCE INFORMATION

1.1. APPLICABILITY.

   a. This Issuance applies to the DoDEA Headquarters Organization, the DoDEA Americas Region, the DoDEA Europe Region, the DoDEA Pacific Region, and to include all schools under the DoDEA authority, and when applicable, teachers, contractors, volunteers, students, support personnel, student teachers, school staff, and sponsors, parents, and legal guardians.

   b. The Issuance applies to DoDEA spaces where science curriculum and instruction occurs.

   c. This Issuance does not apply to other DoDEA spaces covered by DoDEA Administrative Instruction 4800.04.

1.2. POLICY.

   a. It is DoDEA policy that educational and support programs and activities promote a safe and healthy environment to protect DoDEA students, staff, and visitors from chemicals and hazards in DoDEA facilities. DoDEA will comply with all Federal, DoD, DoDEA regulations, policies, and guidance or host nation statutes.

   b. This Issuance authorizes DoDEA Headquarters to publish pamphlets, manuals, or other materials to assist in achieving chemically safe DoDEA school environments. All published materials must be approved by the DoDEA Curriculum and Instruction Division Chief and the Safety and Occupational Health Division Chief. All CHP information is available at the DoDEA Connects “Chemical Hygiene in DoDEA Schools Website,” hereafter referred to in this Issuance as “DoDEA Connects Website.”

1.3. INFORMATION COLLECTION. This Issuance may result in the collection of information due to its policy and procedures. Any collection of information must follow all applicable Federal, DoD, and DoDEA regulations, policies, and guidance.
SECTION 2: RESPONSIBILITIES

2.1. DODEA DIRECTOR. The DoDEA Director:

   a. Establishes and enforces the CHP in accordance with this Issuance.

   b. Provides assistance and resources to DoDEA Region and District offices to achieve compliance with the provisions of this Issuance and applicable Federal, DoD, and DoDEA regulations, policies, and guidance.

2.2. DODEA DIRECTOR FOR STUDENT EXCELLENCE. The DoDEA Director for Student Excellence:

   a. Ensures the implementation and enforcement of the CHP within their respective Region.

   b. Ensures the District Superintendent designates the District Science Instructional System Specialist (ISS) in writing to perform the duties of the District Chemical Hygiene Advisor (CHA).

   c. Ensures that safety concerns are identified and resolved in accordance with Issuance.

2.3. DODEA SAFETY AND OCCUPATIONAL HEALTH DIVISION CHIEF. The DoDEA Safety and Occupational Health (SOH) Division Chief:

   a. Monitors compliance of the CHP in accordance with this Issuance.

   b. Reviews the CHP annually for accuracy and to promulgate CHP checklists and other reference aids and tools to assist CHP compliance.

   c. Generates and provides communications to the DoDEA Region Service Centers, District offices, and DoDEA schools regarding policy and guidance outlined in this Issuance.

   d. Supports the DoDEA CHA to develop training for the District CHAs, Chemical Hygiene Officer (CHO), science teachers, and support staff.

   e. Supports the DoDEA CHA to identify chemicals that are safe for use in DoDEA schools and aligned to DoDEA course standards.

2.4. DODEA SECONDARY SCIENCE INSTRUCTIONAL SYSTEM SPECIALIST. The DoDEA Secondary Science ISS performs the duties of the DoDEA CHA:

   a. Advises the DoDEA Director on Federal and chemical hygiene (CH) standards applicable to the DoDEA science classrooms and laboratories.
b. Collaborates with the SOH Division Chief to coordinate policy for the CHP.

c. Collaborates with the District CHAs to disseminate CHP guidance.

d. Develops training for CHAs, CHOs, science teachers, and support staff in accordance with this Issuance.

e. Provides guidance to the DoDEA SOH Division Chief on the alignment of chemicals with current course standards.

f. Identifies chemicals aligned with current course standards that can be used in the classroom or laboratory with DoDEA students.

2.5. **DODEA DISTRICT SUPERINTENDENT.** The DoDEA District Superintendent:

a. Ensures compliance with this Issuance at DoDEA schools within their respective Districts.

b. Designates in writing the District Science ISS to perform the duties of the District CHA.

c. Ensures the District CHA attends the required training provided by the DoDEA CHA to perform the assigned duties.

d. Ensures sufficient resources and time are available for the District CHA to coordinate and implement this Issuance.

e. Reviews the CHP with the District SOH Specialist and District CHA annually.

f. Provides sufficient fiscal resources to dispose of hazardous chemicals in accordance with this Issuance and all Federal, DoD, DoDEA, host nation, and military installation regulations, policies, and guidance, and Part 1910 of Title 29, Code of Federal Regulations.

g. Provides sufficient fiscal resources to procure PPE for staff and students.

2.6. **DODEA DISTRICT SAFETY AND OCCUPATIONAL HEALTH SPECIALIST.** The District SOH Specialist:

a. Monitors compliance of the CHP in the District in accordance with this Issuance.

b. Advises the District CHA in the disposal of hazardous waste in accordance with Part 1910 of Title 29, Code of Federal Regulations and host nation requirements, as applicable.

c. Coordinates with the District CHA to enforce and report incidents and resolve issues in accordance with this Issuance.

d. Liaises with the District CHA to support this Issuance.
2.7. **DISTRICT CHEMICAL HYGIENE ADVISOR.** The DoDEA District CHA:

a. Oversees the implementation and management of the CHP at DoDEA schools in accordance with this Issuance.

b. Tracks and schedules training of DoDEA School CHO’s in their Districts.

c. Verifies each DoDEA School CHO conducts two (2) chemical inventories each school year one at the beginning of the school year and before September 30th and one at the close of the school year and no later than June 30th.

d. Supports the DoDEA School Principal, School Support Assistant (SSA), military installation, and the DoDEA School CHO in the disposal of hazardous waste and excess chemicals in accordance with this Issuance.

e. Assists the DoDEA School CHO to implement CH practices in accordance with this Issuance and local requirements.

f. Provides training to the DoDEA School CHO’s on the CHP as provided by DoDEA Headquarters

g. Updates information to the DoDEA Connects Website about additional host nation or military installation requirements for chemical hygiene.

h. Attends CH training and meetings as coordinated by DoDEA Headquarters.

i. Checks the DoDEA Connects Website monthly and disseminates information within their District.

2.8. **DODEA SCHOOL PRINCIPAL.** The DoDEA School Principal:

a. Ensures all DoDEA employees, staff, volunteers, students, support personnel, student teachers, sponsors, parents, and legal guardians are briefed on the authorized handling, transporting, and disposing of chemicals in compliance with this Issuance and the safety data sheet (SDS).

b. Ensures that emergency equipment, such as eyewash stations and showers, are available and in serviceable condition in DoDEA school science laboratories and classrooms where chemicals are used.

c. Ensures that personal protective equipment (PPE) for all applicable DoDEA employees and students is provided.

d. Ensures an accident/injury report (AIR) for all chemical accidents and spills is submitted in accordance with DoDEA Administrative Instruction 6055.01.

e. Purchases all PPE, safety equipment, and supplies required to safely handle, store, and dispose of chemicals in accordance with the SDS, as applicable.
f. Ensures a semi-annual inventory of all chemicals on hand is documented and reflects the current inventory date for chemicals used in science laboratories and classrooms.

g. Provides sufficient spill containment equipment and supplies to contain stored chemicals and waste accumulation contents.

h. Ensures Science SDSs are stored with the other DoDEA school SDSs in both digital and hard copy formats.

i. Develops a CH Plan in partnership with the DoDEA School CHO using the current template available at DoDEA Connects Website. A current copy of the CH Plan is required to be kept on-site and available as requested.

j. Annually designates, in writing, a full-time, permanent staff member that is licensed by DoDEA in chemistry or a current science teacher, to serve as the School CHO. Elementary schools do not require a DoDEA School CHO but do require a person to be designated in writing to provide oversight of the storage, handling, and disposing of chemicals.

k. Ensures that science teachers provide training specific to chemicals being used during classroom instruction to DoDEA students prior to allowing them access to any chemicals.

l. Receives a CHP status briefing from the DoDEA School CHO at the end of each semester.

m. Coordinates with the DoDEA School CHO to establish and implement a procurement plan to ensure only authorized chemicals are ordered and distributed to the science laboratories and classrooms.

n. Establishes a policy and procedures to limit access to chemical storage rooms.

o. Evacuates the area in the event of a spill, as necessary, in accordance with Volume 6 of DoDEA Administrative Instruction 5205.02.

p. Chemicals and kits containing chemicals should not be ordered for receipt during school breaks. The CHO must be available to store the chemicals correctly upon receipt.

2.9. **DODEA SCIENCE TEACHER.** The DoDEA science teacher:

a. Adheres to the safety precautions and procedures concerning hazardous chemicals in the DoDEA science laboratories and classrooms, including type and location, in accordance with the SDS and this Issuance.

b. Ensures that DoDEA students under their responsibility are trained on safe work practices and the use of PPE prior to being allowed to work with any chemicals. DoDEA teachers must be familiar with the SDS for the chemicals being used and train DoDEA students about specific safety precautions with those chemicals before a lab, activity, or demonstration.

c. Issues DoDEA students with serviceable and appropriate PPE based on the SDS.
d. Reports broken or inoperative equipment to the DoDEA School Principal.

e. Maintains awareness of the current safety requirements concerning all chemicals used within their area.

f. Complies with PPE requirements specified by the SDS.

g. Reports all chemical spills and injuries to the DoDEA School Principal immediately to make a notification using the AIR reporting system in accordance with DoDEA Administrative Instruction 6055.01.

h. Ensures a SDS is present for every chemical in the science laboratory or classroom.

i. Notifies the DoDEA School CHO if an SDS is missing or not received through the procurement process.

j. Attends training by the DoDEA School CHO or District CHA annually.

k. Briefs any adult and students on the safe use of chemicals in an activity or experience and ensures proper PPE and practices are used.

l. Procures and uses only chemicals on the authorized chemical list.

m. Evacuates the area in the event of a spill, as necessary, in accordance with Volume 6 of DoDEA Administrative Instruction 5205.02.

2.10. DODEA SCHOOL CHEMICAL HYGIENE OFFICER. The DoDEA School CHO:

a. Completes CHO training upon assignment and as designated by DoDEA CHA.

b. Develops the School CH Plan annually in consultation with the DoDEA School Principal using the current template available at DoDEA Connects Website.

c. Coordinates the CHP with the DoDEA School Principal, the District CHA, and the District SOH Specialist.

d. Briefs the DoDEA School Principal on the status of the CHP at the end of each semester. Briefing guidance provided at DoDEA Connects Website.

e. Is familiar with the current safety requirements concerning regulated substances in their inventory and authorized chemicals for the DoDEA school. Authorized chemicals for the school can be found on the DoDEA Connects Website.

f. Maintains regular direct communication with the District SOH Specialist and the District CHA.

g. Conducts two (2) chemical inventories each school year in accordance with this Issuance.
(1) The first inventory shall be completed before September 30th.

(2) The second inventory shall be performed at the end of the school year or by June 30th, whichever is first.

(3) Inventories will be submitted to the District CHA within three (3) days of the deadline, or before.

h. Conducts quarterly chemical hygiene safety and housekeeping inspections in science laboratories and classrooms, including routine inspections of PPE and emergency protective equipment. Checklists are available on the DoDEA Connects Website.

i. Obtains and updates the SDSs for the DoDEA school(s) under their cognizance for all chemicals stored in science laboratories and classrooms.

j. Ensures all science laboratories and classrooms include a hard copy of the SDS Science Binder with all chemicals currently in the chemical inventory.

k. Ensures chemicals received between inventories that are new to the DoDEA school should be updated in all SDS Science Binders, added to the digital chemical inventory, and provided to the DoDEA School Principal for inclusion in the school SDS Science Binder for all chemicals in the DoDEA school.

l. Informs the DoDEA School Principal, District SOH Specialist, and District CHA of any concerns and issues that may impede the DoDEA School CHO responsibilities.

m. Provides annual training to all DoDEA science teachers prior to the first day of DoDEA students return at the beginning of the school year.

   (1) DoDEA science teachers receive annual training prior to using chemicals in the science classroom and laboratory.

   (2) Training attendance documented and submitted to the DoDEA School Principal and the District CHA.

   (3) DoDEA teacher and school staff training occur prior to the use of chemicals in the science laboratories and classrooms.

n. Assists the DoDEA School Principal and school staff with identifying hazardous waste for disposal that was generated in science laboratories and classrooms prior to the end of the school year.

o. Collaborates with the DoDEA School Principal to establish policy and procedures to limit access to chemical storage rooms.

p. Ensure DoDEA employees are familiar with how to store, wear, remove, maintain, and dispose of PPE.
SECTION 3: CHEMICAL HYGIENE PROGRAM

3.1. CHEMICAL HYGIENE PROGRAM IN SCIENCE LABORATORIES AND CLASSROOMS WEBSITE.

a. Updates to the CHP will be posted at the DoDEA Connects Website.

b. The DoDEA Connects Website will be consulted for the most up-to-date information, templates, and checklists.

c. Website configuration changes will be routed through the Configuration Management Branch in the Information Technology Division.

d. The DoDEA Connects Website includes:

   (1) Templates compliant with this Issuance.

   (2) Authorized chemicals for DoDEA middle schools and high schools.

   (3) The process to request a chemical be added to the authorized chemical list.

   (4) Checklist and tools compliant with this Issuance.

3.2. CHEMICAL HYGIENE PLAN. A CH Plan is required in all secondary schools with science laboratories and classrooms for grades 6-12. The CH Plan outlines occupational safety and health standards, safety rules, and procedures that shall be used as minimum chemical safety procedures for DoDEA schools in accordance with this Issuance and host nation requirements.

a. Developed annually at the beginning of each school year.

b. Developed using the current DoDEA CH Plan template at DoDEA Connects Website.

c. Used as part of required DoDEA teacher and student CH safety training.

d. CH Plans are to be completed and updated yearly by the DoDEA School CHO in consultation with the DoDEA School Principal.

e. CH plans will be submitted to the District CHAs by September 30th annually.

f. CH plans will be stored in all DoDEA science laboratories and classrooms.

3.3. AUTHORIZED CHEMICALS. A list of authorized chemicals that can be used in science laboratories and classrooms is available at DoDEA Connects Website. The authorized chemical lists are separated by grade bands. The “Middle School Authorized Chemicals” list applies to students in grades 6-8, and the “High School Authorized Chemicals.” list applies to students in grades 9-12.
a. Only authorized chemicals shall be ordered for use in the science laboratory or classroom.

b. Chemicals used for demonstration purposes by an adult must be on the authorized chemical list for that grade level.

c. Chemicals from other sources, outside of science curriculum cannot be stored in the science chemical preparation rooms or chemical storage areas and cabinets.

d. Chemicals required for extracurricular projects, events, or other courses cannot be stored in the science chemical storage areas.

e. DoDEA school staff can request to have a chemical reviewed for inclusion on the authorized chemical list for their building type. Instructions for requesting a chemical review can be found on the DoDEA Connects Website.

f. Chemicals that require respirators, are temperature sensitive, or flammables requiring storage in explosion proof containment are not authorized to be procured or used in DoDEA schools in accordance with DoDEA Administrative Instruction 4800.04.

g. Chemicals not on the authorized list for the grades in the DoDEA school cannot be used in the school and should be removed from the school.

3.4. CHEMICAL INVENTORY.

a. A semi-annual inventory of all chemical substances stored or used for all science programs shall be conducted by the DoDEA School CHO. Two (2) chemical inventories will be conducted each school year. One inventory will be conducted at the beginning of the school year and before September 30th and one inventory will be conducted at the close of the school year and no later than June 30th.

b. The DoDEA School CHO shall maintain the semi-annual chemical inventory for chemicals used with DoDEA students for a period of three (3) school years.

c. Copies of the semi-annual inventory will be forwarded to the DoDEA School Principal, District CHA, and District SOH Specialist.

3.5. BASIC SAFETY RULES AND PROCEDURES.

a. Basic laboratory safety rules and procedures for DoDEA school staff and students are in the School CH Plan.

b. All safety rules and procedures should be followed in the science laboratory or classroom in accordance with the School CH Plan and this Issuance.
3.6. PERSONAL PROTECTIVE EQUIPMENT.

a. PPE is determined by the SDS and the current School CH Plan.

b. DoDEA teachers and school staff should review the SDS for all chemicals prior to using.

c. DoDEA school staff shall be aware of laboratory experiments and experiences that require PPE and ensure all DoDEA school staff and students are appropriately attired prior to handling chemicals.

d. Chemical goggles that meet Section 1918.101 Subpart J Title 29 Code of Federal Regulations (also known as the Occupational Safety and Health Administration Personal Protective Equipment Eye and Face Protection Standards) will be used by all DoDEA school staff and students when chemicals are being used in the science laboratories and classrooms.

3.7. EMERGENCY PROTECTIVE EQUIPMENT.

a. Science laboratories and classrooms contain specific emergency protective equipment.

b. Chemicals should only be used in science laboratories and classrooms that contain the emergency equipment needed as designated by the SDSs.

c. Equipment specific to the science laboratory or classroom can include the following:

   (1) Safety Shower. The safety shower shall be used in accordance with DoDEA Administrative Instruction 4800.04.

   (2) Eyewash Station. An eyewash station shall be used and maintained in accordance with DoDEA Administrative Instruction 4800.04.

   (3) Chemical Fume Hood (CFH). CFHs are found in science laboratories. CFHs shall be used and maintained in accordance with DoDEA Administrative Instruction 6055.01.

   (4) Miscellaneous. Other items designated by the DoDEA School CHO and approved by the District SOH Specialist and District CHA or by DoDEA CHA and DoDEA SOH Division Chief.

3.8. CHEMICAL PROCUREMENT.

a. Only authorized chemicals can be procured and used in the DoDEA school.

b. Ensure only chemicals on the authorized list are used in the designated class levels. The DoDEA Connects Website should be consulted for the most current authorized chemicals.

c. Limit on-hand levels of chemicals to what is required by the DoDEA school curricula.

d. Ensure chemicals are labeled in accordance with Section 3.9. of this Issuance.
e. Authorized chemicals are grade level dependent and not course dependent. Chemicals used with mixed grades of students must be authorized for all grades.

f. Kits that include chemicals must be checked prior to purchase to ensure all chemicals in a kit are on the authorized list.

g. Appropriate supply personnel will ensure all inbound chemicals are inventoried, and SDSs are updated in the science laboratories and classrooms.

h. Authorized chemical lists will be made available on the DoDEA Connects Website.

i. Requests can be made for a chemical to be added to the Authorized Chemical Lists.

   (1) Any DoDEA science teacher or DoDEA CHA can request that a chemical be added to the authorized chemical list.

   (2) Current instructions and worksheet to request a chemical is located at the DoDEA Connects Website.

3.9. CHEMICAL LABELING.

a. All chemicals will be labeled in English.

b. Chemicals should be labeled using the Global Harmonized System of Classification and Labeling of Chemicals in accordance with DoDEA Administrative Instruction 4800.04.

c. Chemicals should be marked with the date when opened for the first time.

d. Solutions should be marked with the chemical(s) name(s) and the date created.

3.10. CHEMICAL STORAGE.

a. Chemical storage systems have been provided for DoDEA middle and high school science laboratories and classrooms.

b. The chemical storage system shall be used and monitored by the DoDEA School CHO in accordance with this Issuance.

c. Current storage guidelines can be found on the DoDEA Connects Website.

d. Chemical substances permitted for current experiments should be as small as practical.

e. Storage on bench tops and after-hours storage in CFH is not permitted.

f. Exposure to heat or direct sunlight should be avoided.
g. Chemical storage cabinets in the DoDEA science classroom shall remain locked when not under the direct supervision of the DoDEA science teacher or another full-time staff member.

h. The DoDEA School Principal, in collaboration with the School CHO, will establish policy and procedures to limit access to chemical storage rooms. Policy and procedures limiting access will be documented in the school emergency action plan.

(1) Chemical storage rooms may be secured with a hard key, electronic media (e.g., fobs), Physical Access Control System, or electronic Physical Access Control System (ePACS) in accordance with Volume 3 of DoDEA Administrative Instruction 5205.02. The management and administration of systems used to grant access is the sole responsibility of the DoDEA School Principal in accordance with Volume 3 of DoDEA Administrative Instruction 5205.02.

(2) All chemical storage room access must be limited to the principal or his designee, the chemical hygiene officer, and full-time, permanent science teachers.

i. Students, visitors, or staff not trained in accordance with this Issuance should not be left unattended in the chemical storage area or have unsupervised access.

j. Storage shelves will be 24 inches wide or less, but 12 inches is preferable.

k. Storage shelves will have lips to prevent chemicals from falling.

l. Proper signage for chemical storage rooms will be in accordance with the DoDEA Connects Website.

m. Host nations may have additional requirements. The District CHA should be consulted for host nation requirements. Yearly DoDEA School CHO training will include host nation requirements above and beyond this Issuance.

3.11. CHEMICAL DISPOSAL.

a. Chemicals not on the authorized list for the grade level in the classroom shall be removed.

b. Unneeded chemicals or any chemical not on the authorized chemical list for the DoDEA building shall be disposed of properly in accordance with the SDS and Federal, DoD, DoDEA, and host nation regulations, policies, and guidance.

c. DoDEA School CHOs will work with the military installation to remove unauthorized chemicals.

d. Chemicals that cannot be removed immediately will be marked for disposal and stored in accordance with this Issuance until they can safely be removed from the DoDEA school.
3.12. RECORDS.

a. School CH Plan.

(1) The School CH Plan shall be reviewed by the principal or their designee by September 30th of each school year.

(2) The review date will be documented on the front page of the School CH Plan.

(3) The School CH Plan will be submitted to the DoDEA School Principal and the District CHA.

(4) The School CH Plan will use the current School CH Plan template that can be found at the DoDEA Connects Webpage.

b. Inventories.

(1) Inventory shall be kept by the DoDEA School CHO and reflect the amounts of chemical materials on hand.

(2) These records shall be managed in accordance with the designated Office of the Secretary of Defense (OSD) Record Disposition Schedules, Record Group 330.

c. SDSs should be maintained electronically and at a minimum one (1) hard copy per DoDEA school. SDS digital files should match the most recent inventory and include all chemicals currently housed in science spaces. Storage of the SDS documentation on a DoDEA Official common drive with DoDEA tracked access permissions is acceptable and should be identified by “SDS_CHEMICAL NAME_SCHOOL NAME.”

d. Training records.

(1) DoDEA School CHOs and the District CHA designation and training shall be maintained as a part of the individual’s personnel record.

(2) The District CHA will maintain the attendance records for three (3) years for all science teacher and staff training provided by the DoDEA School CHO.

(3) The SDS documents shall be retained for three (3) years and managed in accordance with the OSD Records Disposition Schedules, Record Group 330.

3.13. TRAINING.

a. The District CHA provides training to the DoDEA School CHO at the beginning of the school year.

b. District CHAs shall maintain records of the DoDEA School CHO training.
c. DoDEA School CHOs provide training to DoDEA science teachers and school staff prior to using chemicals in the science classroom and laboratory.

d. DoDEA School CHOs will document and submit attendance for all school staff trained to the DoDEA School Principal and the District CHA.

   (1) Attendance records will include date, length of training content.

   (2) District CHAs should approve all teacher training topics/content prior to the training date to ensure compliance with this Issuance.

   (3) All teachers and staff present in a science laboratory or classroom will receive annual training.

e. All training related to this Issuance shall be approved by the DoDEA SOH Division Chief and DoDEA CHA.

f. DoDEA school level training shall include:

   (1) Review of the School CH Plan.

   (2) Storage and labeling of chemicals and solutions during the school year.

   (3) Safety equipment in the laboratories.

   (4) Procedures for disposal of chemicals.

   (5) Emergency procedures for DoDEA school staff and students in science laboratories and classrooms.

   (6) Procurement process for chemicals.

   (7) CHP in science laboratories and classrooms website location and components.

   (8) How to read and use an SDS.

   (9) Location of the SDS for all chemicals in the science laboratories and classrooms.

   (10) Any host nation or military installation-specific requirements not covered in this Issuance.
GLOSSARY

G.1. ACRONYMS.

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>AIR</td>
<td>accident/injury report</td>
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<tr>
<td>CFH</td>
<td>chemical fume hood</td>
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<tr>
<td>CH</td>
<td>chemical hygiene</td>
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<td>CHA</td>
<td>chemical hygiene advisor</td>
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<td>CHO</td>
<td>chemical hygiene officer</td>
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<tr>
<td>CHP</td>
<td>Chemical Hygiene Program</td>
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<tr>
<td>ePACS</td>
<td>electronic Physical Access Control System</td>
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<td>ISS</td>
<td>Instructional System Specialist</td>
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<td>OSD</td>
<td>Office of the Secretary of Defense</td>
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<td>PPE</td>
<td>personal protective equipment</td>
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<td>SDS</td>
<td>safety data sheet</td>
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<td>SOH</td>
<td>safety and occupational health</td>
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<td>SSA</td>
<td>School Support Assistant</td>
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G.2. DEFINITIONS. Unless otherwise noted, these terms and their definitions are for the purpose of this Issuance only.

**carcinogen.** A substance capable of causing cancer or cancerous growths in mammals.

**chemical.** An element, chemical compound, or mixture of elements and/or compounds.

**chemical fume hood.** A device enclosed on three (3) sides and the top and bottom and designed and maintained to draw air into the hood at the desired rate to dilute and safely dispel potentially hazardous fumes, gases, mists, or vapors out of the facility. The CFH must be designed, constructed, and maintained in such a way that an operation within the CFH does not require the insertion of a person's body part other than the hands and arms.

**container.** A bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, or the like, which contains a hazardous chemical. This does not refer to pipes or piping systems, engines, fuel tanks, or other operating systems in a container.

**corrosive.** A substance that causes destruction by chemical action or contact.

**disposal.** The safe removal of chemical substances from DoDEA facilities.
emergency protective equipment. Equipment in the science classroom for responding to accidents involving chemicals. Examples of this emergency protective equipment may include eyewash stations, emergency showers, or fire blankets.

exposure. Subjecting a person to a hazardous chemical in the course of employment, study, or visitation to a DoDEA facility or activity. This includes exposure through any route of entry (inhalation, ingestion, skin contact, or absorption) and includes potential (e.g., accidental or possible) exposure.

fume. Airborne particulate that is formed by the condensation of solid particles from the gaseous state. Usually, fumes are generated after the initial combustion process or from a melting process (e.g., metal fume emitted during welding).

gas. A state of matter in which the material has a very low density and viscosity; can expand and contract greatly in response to changes in temperature and pressure; easily diffuses into other gases; readily and uniformly distributes itself throughout any container.

hazardous material. Any substance or compound that has the capability of producing adverse effects on the health and safety of humans.

health hazard. A chemical, mixture of chemicals, or a pathogen for which there is statistically significant evidence based on at least one (1) study conducted in accordance with established scientific principles that acute or chronic health effects may occur in exposed persons. This includes chemicals that are carcinogens; toxic or highly toxic agents; reproductive toxins; irritants; corrosives; sensitizers; hepatotoxins; nephrotoxins; neurotoxins; agents that act on the hematopoietic system; and agents that damage the lungs, skin, eyes, or mucous membranes.

hematopoietic system. Organs or tissues that are involved in the production of blood.

highly toxic. Agents or substances that, when inhaled, absorbed, or ingested in small amounts, can cause death, disablement, or severe illness.

ingestion. Taking in by the mouth.

irritant. A substance that, on immediate, prolonged, or repeated contact with tissue, will induce a local inflammatory reaction.

label. Written, printed, or graphic material displayed on or affixed to containers of hazardous chemicals.

mists. Suspended liquid droplets that are generated by condensation from the gaseous to the liquid state or by breaking up a liquid into a dispersed state, such as by splashing, foaming, or atomizing.

neurotoxins. A class of toxins that are destructive to nerve tissue.

personal protective equipment. Items that are worn by an individual person using or observing chemicals in DoDEA science laboratories or classrooms to protect them from potential chemical
hazards. Examples of PPE are chemical splash goggles, chemical resistant gloves, aprons, and face shields.

**reproductive toxin.** Chemicals that affect the reproductive capabilities including chromosomal damage (mutations) and effects on fetuses (teratogenesis).

**respirator.** A device that is worn over the nose and mouth to prevent inhalation of potentially harmful substances.

**school staff.** All DoDEA employees, and volunteers that are working within a DoDEA school or facility.

**vapor.** The gaseous form of substances that are normally in the solid or liquid state at room temperature and pressure. The vapor can be changed back to the solid or liquid state either by increasing the pressure or decreasing the temperature alone. Vapors also diffuse.

**waste.** A chemical substance that is determined to be no longer useful.
REFERENCES

Code of Federal Regulations, Title 29
DoDEA Administrative Instruction 5205.02, Volume 3, “DoDEA Force Protection: Physical Security” October 14, 2021
DoDEA Administrative Instruction 6055.01, “DoDEA Safety Program,” November 27, 2017
DoDEA Connects Website, “Chemical Hygiene in Science Laboratories and Classrooms”,
https://service.dodea.edu/connects?id=connects_article_view&sys_id=ab4e34a5b6d2850ed596dee60779e64.
Occupational Safety and Health Administration 1918 Subpart J Personal Protective Equipment 1918.101 Eye and Face Protection
Office of the Secretary of Defense Records Disposition Schedules, Record Group 330, April 2021
## APPENDIX

### APPENDIX 1: INTERNAL CONTROLS EVALUATION CHECKLIST

<table>
<thead>
<tr>
<th>DoDEA SOH Division Chief and DoDEA CHA</th>
<th>YES/NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the DoDEA CHA monitoring compliance of the CHP?</td>
<td></td>
</tr>
<tr>
<td>Is the DoDEA SOH Division Chief coordinating with the DoDEA CHA to develop District CHA and District CHO training?</td>
<td></td>
</tr>
<tr>
<td>Is the CHP being coordinated by DoDEA SOH Division Chief and the DoDEA CHA?</td>
<td></td>
</tr>
<tr>
<td>Has the DoDEA CHA and District CHA coordinated CHP at the beginning of each school year?</td>
<td></td>
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</tbody>
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<table>
<thead>
<tr>
<th>District</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Has the District Superintendent designated, in writing, the District Science ISS to serve as District CHA?</td>
<td></td>
</tr>
<tr>
<td>Has the District Superintendent ensured the District CHA attend training?</td>
<td></td>
</tr>
<tr>
<td>Has the District Superintendent provided sufficient resources and time for coordinating of the CHP by the District CHA?</td>
<td></td>
</tr>
<tr>
<td>Has the District Superintendent ensured compliance in accordance with this Issuance?</td>
<td></td>
</tr>
<tr>
<td>Have the District SOH Specialist and District CHA met within the last calendar year to coordinate CHP?</td>
<td></td>
</tr>
<tr>
<td>Has the District SOH Specialist coordinated with the District CHA to dispose of chemical waste?</td>
<td></td>
</tr>
<tr>
<td>Has the District SOH Specialist coordinated with the District CHA to support and enforce the requirements in accordance with this Issuance?</td>
<td></td>
</tr>
<tr>
<td>Has the District CHA tracked training of DoDEA School CHOs?</td>
<td></td>
</tr>
<tr>
<td>Has the District CHA verified accurate completion of the first chemical inventory by September 30th for all DoDEA schools?</td>
<td></td>
</tr>
<tr>
<td>Has the District CHA verified accurate completion of the second chemical inventory by the end of school year for all DoDEA schools?</td>
<td></td>
</tr>
<tr>
<td>Has the District CHA completed training and meetings per the current guidelines?</td>
<td></td>
</tr>
<tr>
<td>Has the District CHA updated the host nation and military installation information for their District at the DoDEA Connects Website?</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>DoDEA School Principal Level</th>
<th>YES/NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has the DoDEA School Principal ensured compliance with this Issuance?</td>
<td></td>
</tr>
<tr>
<td>Has the DoDEA School Principal provided time for the DoDEA School CHO to conduct science teacher CHP training before DoDEA students return for the new school year?</td>
<td></td>
</tr>
<tr>
<td>Question</td>
<td>Answer</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>Has the DoDEA School Principal provided PPE, safety equipment, and supplies to science laboratories and classrooms?</td>
<td></td>
</tr>
<tr>
<td>Has the DoDEA School Principal coordinated with the DoDEA School CHO on a procurement path for receiving and inventorying all science chemicals?</td>
<td></td>
</tr>
<tr>
<td>Has the DoDEA School Principal designated a DoDEA School CHO for the school year?</td>
<td></td>
</tr>
<tr>
<td>Has the DoDEA School Principal received a status briefing from the DoDEA School CHO at the end of Semester 1?</td>
<td></td>
</tr>
<tr>
<td>Has the DoDEA School Principal received a status briefing from the DoDEA School CHO at the end of Semester 2?</td>
<td></td>
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</tbody>
</table>

**DoDEA School Staff Level**

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has the DoDEA School CHO completed annual training requirements in accordance with this Issuance?</td>
<td></td>
</tr>
<tr>
<td>Has the DoDEA School CHO provided in an inventory to the DoDEA School Principal by September 30 of the school year?</td>
<td></td>
</tr>
<tr>
<td>Has the CHO provided in an inventory to the DoDEA School Principal before leaving at the end of the school year?</td>
<td></td>
</tr>
<tr>
<td>Do the DoDEA teachers comply with the required PPE and emergency equipment requirements specified by the SDS?</td>
<td></td>
</tr>
<tr>
<td>Has the DoDEA School CHO completed training upon assignment and yearly as specified by the District CHA?</td>
<td></td>
</tr>
<tr>
<td>Has the DoDEA School CHO coordinated with the DoDEA School Principal on the CHP for the DoDEA school?</td>
<td></td>
</tr>
<tr>
<td>Has the DoDEA School CHO provided the DoDEA School Principal with a brief on the status of the CHP at the end of each semester?</td>
<td></td>
</tr>
<tr>
<td>Was the first chemical inventory before September 30th?</td>
<td></td>
</tr>
<tr>
<td>Was the second chemical inventory conducted by the end of school year?</td>
<td></td>
</tr>
<tr>
<td>Was a chemical hygiene safety and housekeeping self-inspections completed each quarter?</td>
<td></td>
</tr>
<tr>
<td>Was chemical hygiene training provided to DoDEA science teachers who use chemicals with DoDEA students at the beginning of each school year as determined by the District CHA?</td>
<td></td>
</tr>
</tbody>
</table>

**Employee Level**

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have all DoDEA science teachers attended annual CH training?</td>
<td></td>
</tr>
<tr>
<td>Are PPE specified by the SDS being used in the science laboratory or classroom?</td>
<td></td>
</tr>
<tr>
<td>Are DoDEA teacher training students on chemicals prior to each use?</td>
<td></td>
</tr>
</tbody>
</table>