Environment Protection - 25 x 25 - 2

Across

1 A way of measuring concentrations of certain substances in water using an electric current that flows during a chemical reaction. (11,9)

3 Offensively malodorous. (4)

4 A colourless naturally occurring, radioactive, inert gas formed by radioactive decay of radium atoms in soil or rocks. (5)

6 - A measure of the amount of oxygen consumed in the biological processes that break down organic matter in water. The greater the XXX, the greater the degree of pollution. (3)

8 Organic compounds that are byproducts of petroleum refining, tanning, and textile, dye, and resin manufacturing. Low concentrations cause taste and odour problems in water; higher concentrations can kill aquatic life and humans. (7)

12 The wearing away of land surface by wind or water, intensified by land-clearing practices related to farming, residential or industrial development, road building, or logging. (7)

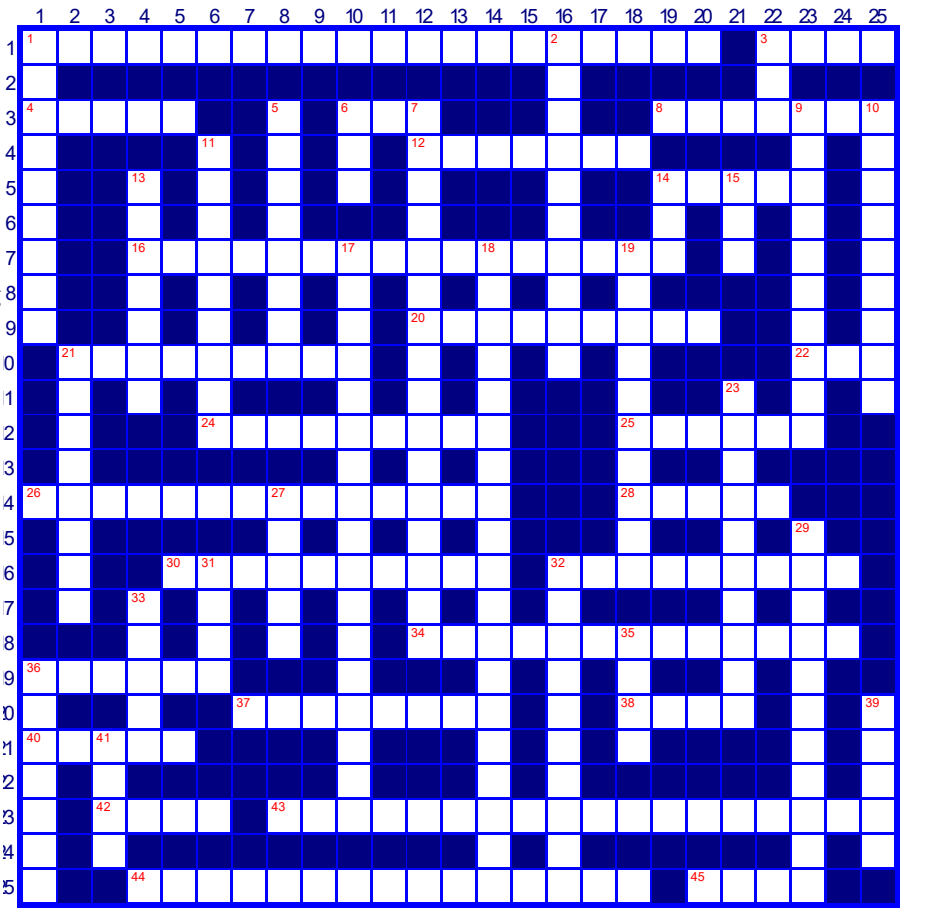
14 A control device that burns hazardous materials to prevent their release into the environment; may operate continuously or intermittently, usually on top of a stack. (5)

16 In pesticides, the application of a chemical on plant stems or tree trunks just above the soil line. (5,11)

20 An animal that feeds on plants. (9)

21 Common term for a pesticide data package record. (4,5)

22 The first chlorinated hydrocarbon insecticide chemical name Dichloro-Diphenyl-Trichloroethane) . It has a half-life of 15 years and can collect in fatty tissues of certain animals. EPA banned registration and interstate sale of XXX for virtually all but



emergency uses in the United States in 1972 because of its persistence in the environment and accumulation in the food chain. (3)

24 The addition of hydrogen, removal of oxygen, or addition of electrons to an element or compound. (9)

25 1. A shallow pond where sunlight, bacterial action, and oxygen work to purify wastewater; also used for storage of wastewater or spent nuclear fuel rods. 2. Shallow body of water, often separated from the sea by coral reefs or sandbars. (6)

26 An enzyme found in animals that regulates nerve impulses by the inhibition of acetylcholine. XXXXXXXXX XXXXX inhibition is associated with a variety of acute symptoms such as nausea, vomiting, blurred vision, stomach cramps, and rapid heart rate. (14)

28 A commercial leavening agent containing XXXXX cells; used to raise the dough in making bread and for fermenting beer or whiskey (5)

30 A chemical that aids in suspending one liquid in another. Usually an organic chemical in an aqueous solution. (10)

32 Use of screens to remove coarse floating and suspended solids from sewage. (9)

34 Prediction by some scientists that smoke and debris rising from massive fires of a nuclear war could block sunlight for weeks or months, cooling the earth's surface and producing climate changes that could, for example, negatively affect world agricultural and weather patterns. (7,6)

36 Crushed glass. (6)

37 An accidental or intentional discharge of oil which reaches bodies of water. Can be controlled by chemical dispersion, combustion, mechanical containment, and/or adsorption. Spills from tanks and pipelines can also occur away from water bodies, contaminating the soil, getting into sewer systems and threatening underground water sources. (3,5)

38 Carbon dust formed by incomplete combustion. (4)

40 A type of wetland that does not accumulate appreciable peat deposits and is dominated by herbaceous vegetation. Marshes may be either fresh or saltwater, tidal or non-tidal. (5)

42 Air pollution typically associated with oxidants. (4)

43 Use of magnets to separate ferrous materials from mixed municipal waste stream. (8,10)

44 Waste from remediation activities. (9,6)

45 Tiny particles trapped in vapour in a gas stream. (4)

Down

1 Any space used to convey air in a building, furnace, or structure. The space above a suspended ceiling is often used as an air plenum. (9)

2 Any unconfined portion of the atmosphere open air, surrounding air. (7,3)

3 Low-lying wet land with grassy vegetation; usually is a transition zone between land and water. (3)

5 1. The time required for a pollutant to lose one-half of its original concentraton. For example, the biochemical XXXX XXXX of DDT in the environment is 15 years. 2. The time required for half of the atoms of a radioactive element to undergo self-transmutation or decay (half-life of radium is

1620 years). 3. The time required for the elimination of half a total dose from the body. (4,4)

6 A type of wetland that accumulates appreciable peat deposits. Bogs depend primarily on precipitation for their water source, and are usually acidic and rich in plant residue with a conspicuous mat of living green moss. (3)

7 Removal of sulphur from fossil fuels to reduce pollution. (16)

9 Rock and soil cleared away before mining. (4,6)

10 Soil, sand, and minerals washed from land into water, usually after rain. They pile up in reservoirs, rivers and harbours, destroying fish and wildlife habitat, and clouding the water so that sunlight cannot reach aquatic plants. (9)

11 Analytical device comprising a biological recognition element (e.g., enzyme, receptor, DNA, antibody, or microorganism) in intimate contact with an electrochemical, optical, thermal, or acoustic signal transducer that together permit analyses of chemical properties or quantities. Shows potential development in some areas, including environmental monitoring. (9)

13 The place where a population (e.g., human, animal, plant, microorganism) lives and its surroundings, both living and non-living. (7)

14 A type of wetland that accumulates peat deposits. XXXs are less acidic than bogs, deriving most of their water from groundwater rich in calcium and magnesium. (3)

15 The mineral content of a product remaining after complete combustion. (3)

17 Air pollution caused by chemical reactions of various pollutants emitted from different sources. (13,4)

18 (CC14) Compound consisting of one carbon atom and four chlorine atoms, once widely used as a industrial raw material, as a solvent, and in the production of CFCs. Use as a solvent ended when it was discovered to be carcinogenic. (6,13)

19 The protective layer in the atmosphere, about 15 miles above the ground, that absorbs some of the sun's ultraviolet rays, thereby reducing the amount of potentially harmful radiation that reaches the earth's surface. (5,5)

21 Hole made with drilling equipment. (4,4)

23 (DU) Units of ozone level measurement. If, for example, 100 DU of ozone were brought to the earth's surface they would form a layer one millimeter thick. Ozone levels vary geographically, even in the absence of ozone depletion. (6,4)

27 Minerals that water picks up as it passes through the air, over and under the ground, or from households and industry. (5)

29 A pesticide compound specifically used to kill or prevent the growth of insects. (11)

31 Liquid particles measuring 40 to 500 micrometers (pm), are formed by condensation of vapour. By comparison, fog particles are smaller than 40 micrometers (pm). (4)

32 It destroys or eliminates all forms of bacteria, viruses, and fungi and their spores. (10)

33 1. In solid waste disposal, holes where waste is dumped, compacted, and covered with layers of dirt on a daily basis. 2. The smallest structural part of living matter capable of

functioning as an independent unit. (5)

35 A machine that grinds waste into a manageable material and helps prevent odor. (4)

36 The relatively stable humus material that is produced from a composting process in which bacteria in soil mixed with garbage and degradable trash break down the mixture into organic fertilizer. (7)

39 Any physical, chemical, or biological entity that can be harmful to an organism. (5)

41 A measure of the probability that damage to life, health, property, and/or the environment will occur as a result of a given hazard. (4)