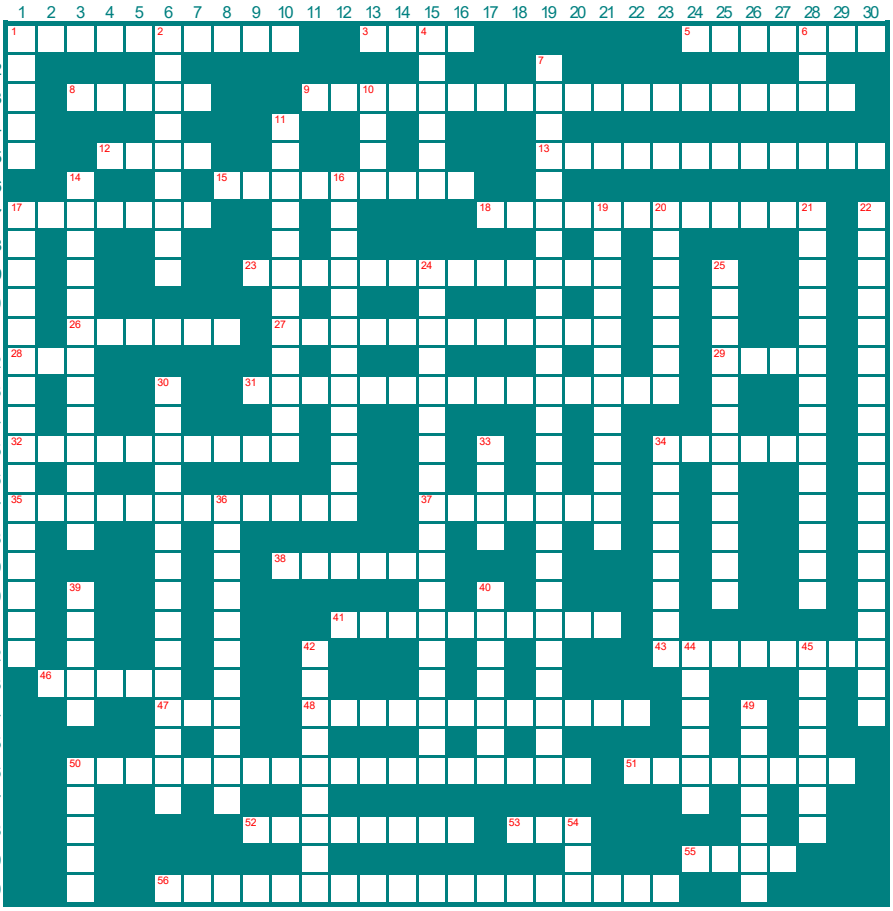
Environment Protection - 30 x 30 - Starting with Letters A to F



Across

1 Pumping dry air into a container to assist with the withdrawal of liquid or to force a liquefied gas such as chlorine out of the container. (3,7)

3 The amount of dissolved oxygen consumed in five days by biological processes breaking down organic matter. (4)

5 An underground geological formation, or group of formations, containing water. Are sources of groundwater for wells and springs. (7)

8 The animal and plant life of a given region. (5)

9 A material added to a suspension to prevent settling. (14,5)

12 The uranium-containing heart of a nuclear reactor, where energy is released. (4)

13 A structure that helps remove heat from water used as a coolant; e.g., in electric power generating plants. (7,5)

15 A chemical agent that absorbs moisture; some desiccants are capable of drying out plants or insects, causing death. (9)

17 A device that generates a cold liquid that is circulated through an air-handling unit's cooling coil to cool the air supplied to the building. (7)

18 A colorless, pungent, and irritating gas, CH20, used chiefly as a disinfectant and preserva- tive and in synthesizing other compounds like resins. (12)

23 A machine that converts solid waste into compost by grinding and aeration. (13)

26 MONOXIDE (CO) A colorless, odorless, poisonous gas produced by incomplete fossil fuel combustion. (6)

27 Any substance in air that could, in high enough concentration, harm man, other animals, vegetation, or material. (3,9)

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

29 A site used to dispose off solid waste without environmental controls. (4)

31 Degree of ability to be absorbed and ready to interact in organism metabolism. (15)

32 A treatment process for removing solid (particulate) matter from water by means of porous media such as sand or a man-made filter; often used to remove particles that contain pathogens. (10)

34 The condition of water or soil that contains a sufficient amount of acid substances to lower the pH below 7.0. (6)

35 The consecutive generation of useful thermal and electric energy from the same fuel source. (12)

37 Small tank or storage facility used to store water for a home or farm; often used to store rain water. (7)

38 1. The actual quantity of a chemical administered to an organism or to which it is exposed. 2. The amount of a substance that reaches a specific tissue (e.g., the liver). 3. The amount of a substance available for interaction with metaboic processes after crossing the outer boundary of an organism. (6)

41 Interference or inhibition of the effect of one chemical by the action of another. (10)

43 Wastewater--treated or untreated--that flows out of a treatment plant, sewer, or industrial outfall. Generally refers to wastes discharged into surface waters. (8)

46 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)

47 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)

48 A chamber used to inject air into water. (8,4)

50 Temperature of the surrounding air or other medium. (7,11)

51 Final placement or destruction of toxic, radioactive, or other wastes; surplus or banned pesticides or other chemicals; polluted soils; and drums containing hazardous materials from removal actions or accidental releases. XXXXXXXX may be accomplished through use of approved secure landfills, surface impoundments, land farming, deep-well injection, ocean dumping, or incineration. (8)

52 Removal of mud from the bottom of water bodies. This can disturb the ecosystem and causes silting that kills aquatic life. XXXXXXXX of contaminated muds can expose biota to heavy metals and other toxics. (8)

53 - 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)

55 1. A floating device used to contain oil on a body of water. 2. A piece of equipment used to apply pesticides from a tractor or truck. (4)

56 The loss of water from the soil both by evaporation and by transpiration from the plants growing in the soil. (18)

Down

1 Simple rootless plants that grow in sunlit waters in proportion to the amount of available nutrients. They can affect water quality adversely by lowering the dissolved oxygen in the water. They are food for fish and small aquatic animals. (5)

2 Synthetic washing agent that helps to remove dirt and oil. Some contain compounds which kill useful bacteria and encourage algae growth when they are in wastewater that reaches receiving waters. (9)

4 Any of a family of compounds known chemically as dibenzo-p-dioxins. Concern about them arises from their potential toxicity as contaminants in commercial products. Tests on laboratory animals indicate that it is one of the more toxic anthropogenic (man-made) compounds. (6)

6 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)

7 (ESP) A device that removes particles from a gas stream (smoke) after combustion occurs. The XXX imparts an electrical charge to the particles, causing them to adhere to metal plates inside the precipitator. Rapping on the plates causes the particles to fall into a hopper for disposal. (13,12)

10 A clump of solids formed in sewage by biological or chemical action. Chemicals (coagulants) are added to the water to bring the nonsettling particles together into larger, heavier masses of solids called XXXX. (4)

11 The ability of a body of water to purify itself of pollutants. (12)

14 Techniques that use living organisms or parts of organisms to produce a variety of products (from medicines to industrial enzymes) to improve plants or animals or to develop microorganisms to remove toxics from bodies of water, or act as pesticides. (13)

16 Preserving and renewing, when possible, human and natural resources. The use, protection, and improvement of natural resources according to principles that will ensure their highest economic or social benefits. (12)

17 Conversion of coal to a gaseous product by one of several available technologies. (4,12)

19 A treatment system that removes volatile organic compounds from contaminated ground water or surface water by forcing an airstream through the water and causing the compounds to evaporate. (3,9)

20 A measure of how heavy a specific volume of a solid, liquid, or gas is in comparison to water. (7)

21 The slow aging process during which a lake, estuary, or bay evolves into a bog or marsh and eventually disappears. During the later stages of eutrophication the water body is choked by abundant plant life due to higher levels of nutritive compounds such as nitrogen and phosphorus. Human activities can accelerate the process. (14)

22 An air pollution abatement device that removes pollutants from motor vehicle exhaust, either by oxidizing them into carbon dioxide and water or reducing them to nitrogen. (9,9)

24 A machine that sorts organic from inorganic matter for composting. (9,9)

25 Study of the distribution of disease, or other health-related states and events in human populations, as related to age, sex, occupation, ethnicity, and economic status in order to identify and alleviate health problems and promote better health. (12)

30 Waste from remediation activities. (9,6)

33 A thick-walled container (usually lead) used to transport radioactive material. Also called a coffin. (4)

34 Substance or chemical used specifically to kill or control algae. (8)

36 Injecting air or oxygen into an aquifer to strip or flush volatile contaminants as air bubbles up through the ground water and is captured by a vapor extraction system. (3,8)

39 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)

40 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)

42 Reducing the degree or intensity of, or eliminating, pollution. (9)

44 Non-combustible residual particles expelled by flue gas. (3,3)

45 Region of interaction between rivers and near-shore ocean waters, where tidal action and river flow mix fresh and salt water. Such areas include bays, mouths of rivers, salt marshes, and lagoons. These brackish water ecosystems shelter and feed marine life, birds, and wildlife. (7)

49 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)

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

54 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)