



Ohio Administrative Code Rule 3701:1-50-01 Definitions.

Effective: February 15, 2021

Terms defined in rule 3701:1-38-01 of the Administrative Code shall have the same meaning when used in this chapter except terms redefined within a given rule for use within that rule only, and additionally, as used in this chapter of the Administrative Code:

(A) "Carrier" means a person engaged in the transportation of passengers or property by land or water as a common, contract, or private carrier, or by civil aircraft.

(B) "Certificate holder" means a person who has been issued a certificate of compliance or other package approval by the United States nuclear regulatory commission.

(C) "Certificate of compliance (CoC)" means the certificate issued by the United States nuclear regulatory commission under subpart D of 10 C.F.R. 71 (as in effect on the effective date of this rule) which approves the design of a package for the transportation of radioactive material.

(D) "Closed transport vehicle" means a transport vehicle equipped with a securely attached exterior enclosure that during normal transportation restricts the access of unauthorized persons to the cargo space containing the radioactive material. The enclosure may be temporary or permanent but shall limit access from top, sides, and ends. In the case of packaged materials, it may be of the "see-through" type.

(E) "Close reflection by water" means immediate contact by water of sufficient thickness for maximum reflection of neutrons.

(F) "Consignment" means each shipment of a package or groups of packages or load of radioactive material offered by a shipper for transport.

(G) "Containment system" means the assembly of components of the packaging intended to retain the radioactive material during transport.



(H) "Contamination" means the presence of a radioactive substance on a surface in quantities in excess of 0.4 becquerel per square centimeter (1×10^{-5} microcurie per square centimeter) for beta and gamma emitters and low toxicity alpha emitters, or 0.04 becquerel per square centimeter (1×10^{-6} microcurie per square centimeter) for all other alpha emitters.

(1) Fixed contamination means contamination that cannot be removed from a surface during normal conditions of transport.

(2) Non-fixed contamination means contamination that can be removed from a surface during normal conditions of transport.

(I) "Conveyance" means:

(1) For transport by public highway or rail, any transport vehicle or large freight container;

(2) For transport by water, any vessel, or any hold, compartment, or defined deck area of a vessel including any transport vehicle on board the vessel; and

(3) For transport by air, any aircraft.

(J) "Criticality safety index (CSI)" means the dimensionless number (rounded up to the next tenth) assigned to and placed on the label of a fissile material package, to designate the degree of control of accumulation of packages, overpacks or freight containers containing fissile material during transportation. Determination of the criticality safety index is described in rules 3701:1-50-11 and 3701:1-50-12 of the Administrative Code and 10 C.F.R. 71.59 (as in effect on the effective date of this rule). The criticality safety index for an overpack, freight container, consignment or conveyance containing fissile material packages is the arithmetic sum of the criticality safety indices of all the fissile material packages contained within the overpack, freight container, consignment or conveyance.

(K) "Deuterium" means, for the purpose of rules 3701:1-50-11 and 3701:1-50-13 of the Administrative Code, deuterium and any deuterium compounds, including heavy water, in which the



ratio of deuterium atoms to hydrogen atoms exceeds one to five thousand.

(L) "DOT" means United States department of transportation.

(M) "Enriched uranium" means uranium containing more uranium-235 than the naturally occurring distribution of uranium isotopes.

(N) "Exclusive use" means the sole use by a single consignor of a conveyance for which all initial, intermediate, and final loading and unloading are carried out in accordance with the direction of the consignor or consignee. The consignor and the carrier must ensure that any loading or unloading is performed by personnel having radiological training and resources appropriate for safe handling of the consignment. The consignor must issue specific instructions, in writing, for maintenance of exclusive use shipment controls, and include them with the shipping paper information provided to the carrier by the consignor.

(O) "Graphite" means, for the purposes of rules 3701:1-50-11 and 3701:1-50-13 of the Administrative Code, graphite with a boron equivalent content less than five parts per million and density greater than 1.5 grams per cubic centimeter.

(P) "Indian tribe" means an Indian or Alaska native tribe, band, nation, pueblo, village, or community that the secretary of the interior acknowledges to exist as an Indian tribe pursuant to the Federally Recognized Indian Tribe List Act of 1994, Pub.L. No. 103-454, 108 Stat. 4791, 25 U. S. C. 5130 (as in effect on the effective date of this rule).

(Q) "Low toxicity alpha emitters" means natural uranium, depleted uranium, natural thorium, uranium-235, uranium-238, thorium-232, thorium-228 or thorium-230 when contained in ores or physical or chemical concentrates or tailings; or alpha emitters with a half-life of less than ten days.

(R) "Maximum normal operating pressure" means the maximum gauge pressure that would develop in the containment system in a period of one year under the heat condition specified in 10 C.F.R. 71.71(C)(1) (as in effect on the effective date of this rule), in the absence of venting, external cooling by an ancillary system, or operational controls during transport.



(S) "Natural thorium" means thorium with the naturally occurring distribution of thorium isotopes or one hundred weight per cent thorium-232.

(T) "Natural uranium" means uranium (which may be chemically separated) with the naturally occurring distribution of uranium isotopes (approximately 0.711 weight per cent uranium-235, and the remainder by weight essentially uranium-238).

(U) "Optimum interspersed hydrogenous moderation" means the presence of hydrogenous material between packages to such an extent that the maximum nuclear reactivity results.

(V) "Specific activity of a radionuclide" means the radioactivity of the radionuclide per unit mass of that nuclide. The specific activity of a material in which the radionuclide is essentially uniformly distributed is the radioactivity per unit mass of the material.

(W) "Spent nuclear fuel or spent fuel" means fuel that has been withdrawn from a nuclear reactor following irradiation, has undergone at least one year's decay since being used as a source of energy in a power reactor, and has not been chemically separated into its constituent elements by reprocessing. Spent fuel includes the special nuclear material, byproduct material, source material, and other radioactive materials associated with fuel assemblies.

(X) "State" means a state of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.

(Y) "Tribal official" means the highest ranking individual that represents tribal leadership of an Indian tribe, such as the chief, president, or tribal council leadership.

(Z) "Unirradiated uranium" means uranium containing not more than two thousand becquerels (fifty-four nanocuries) of plutonium per gram of uranium-235, not more than nine megabecquerels (two hundred forty-three microcuries) of fission products per gram of uranium-235, and not more than 0.005 grams of uranium-236 per gram of uranium-235.