corrosivity, or reactivity as regulated under paragraph (a)(2)(iv) of this section is not a hazardous waste, if the mixture no longer exhibits any characteristic of hazardous waste identified in subpart C of this part for which the hazardous waste listed in subpart D of this part was listed.

- (h)(1) Hazardous waste containing radioactive waste is no longer a hazardous waste when it meets the eligibility criteria and conditions of 40 CFR part 266, Subpart N ("eligible radioactive mixed waste").
- (2) The exemption described in paragraph (h)(1) of this section also pertains to:
- (i) Any mixture of a solid waste and an eligible radioactive mixed waste; and
- (ii) Any solid waste generated from treating, storing, or disposing of an eligible radioactive mixed waste.
- (3) Waste exempted under this section must meet the eligibility criteria and specified conditions in 40 CFR 266.225 and 40 CFR 266.230 (for storage and treatment) and in 40 CFR 266.310 and 40 CFR 266.315 (for transportation and disposal). Waste that fails to satisfy these eligibility criteria and conditions is regulated as hazardous waste.

[57 FR 7632, Mar. 3, 1992; 57 FR 23063, June 1, 1992, as amended at 57 FR 37263, Aug. 18, 1992; 57 FR 41611, Sept. 10, 1992; 57 FR 49279, Oct. 30, 1992; 59 FR 38545, July 28, 1994; 60 FR 7848, Feb. 9, 1995; 63 FR 28637, May 26, 1998; 63 FR 42184, Aug. 6, 1998; 66 FR 27297, May 16, 2001; 66 FR 50333, Oct. 3, 20011

§ 261.4 Exclusions.

- (a) Materials which are not solid wastes. The following materials are not solid wastes for the purpose of this part:
 - (1)(i) Domestic sewage; and
- (ii) Any mixture of domestic sewage and other wastes that passes through a sewer system to a publicly-owned treatment works for treatment. "Domestic sewage" means untreated sanitary wastes that pass through a sewer system.
- (2) Industrial wastewater discharges that are point source discharges subject to regulation under section 402 of the Clean Water Act, as amended.

[Comment: This exclusion applies only to the actual point source discharge. It

does not exclude industrial wastewaters while they are being collected, stored or treated before discharge, nor does it exclude sludges that are generated by industrial wastewater treatment.]

- (3) Irrigation return flows.
- (4) Source, special nuclear or byproduct material as defined by the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2011 *et seq*.
- (5) Materials subjected to in-situ mining techniques which are not removed from the ground as part of the extraction process.
- (6) Pulping liquors (i.e., black liquor) that are reclaimed in a pulping liquor recovery furnace and then reused in the pulping process, unless it is accumulated speculatively as defined in §261.1(c) of this chapter.
- (7) Spent sulfuric acid used to produce virgin sulfuric acid, unless it is accumulated speculatively as defined in \$261.1(c) of this chapter.
- (8) Secondary materials that are reclaimed and returned to the original process or processes in which they were generated where they are reused in the production process provided:
- (i) Only tank storage is involved, and the entire process through completion of reclamation is closed by being entirely connected with pipes or other comparable enclosed means of conveyance:
- (ii) Reclamation does not involve controlled flame combustion (such as occurs in boilers, industrial furnaces, or incinerators);
- (iii) The secondary materials are never accumulated in such tanks for over twelve months without being reclaimed; and
- (iv) The reclaimed material is not used to produce a fuel, or used to produce products that are used in a manner constituting disposal.
- (9)(i) Spent wood preserving solutions that have been reclaimed and are reused for their original intended purpose; and
- (ii) Wastewaters from the wood preserving process that have been reclaimed and are reused to treat wood.
- (iii) Prior to reuse, the wood preserving wastewaters and spent wood

preserving solutions described in paragraphs (a)(9)(i) and (a)(9)(ii) of this section, so long as they meet all of the following conditions:

- (A) The wood preserving wastewaters and spent wood preserving solutions are reused on-site at water borne plants in the production process for their original intended purpose;
- (B) Prior to reuse, the wastewaters and spent wood preserving solutions are managed to prevent release to either land or groundwater or both;
- (C) Any unit used to manage wastewaters and/or spent wood preserving solutions prior to reuse can be visually or otherwise determined to prevent such releases;
- (D) Any drip pad used to manage the wastewaters and/or spent wood preserving solutions prior to reuse complies with the standards in part 265, subpart W of this chapter, regardless of whether the plant generates a total of less than 100 kg/month of hazardous waste; and
- (E) Prior to operating pursuant to this exclusion, the plant owner or operator submits to the appropriate Regional Administrator or State Director a one-time notification stating that the plant intends to claim the exclusion, giving the date on which the plant intends to begin operating under the exclusion, and containing the following language: "I have read the applicable regulation establishing an exfor wood preserving wastewaters and spent wood preserving solutions and understand it requires me to comply at all times with the conditions set out in the regulation.' The plant must maintain a copy of that document in its on-site records for a period of no less than 3 years from the date specified in the notice. The exclusion applies only so long as the plant meets all of the conditions. If the plant goes out of compliance with any condition, it may apply to the appropriate Regional Administrator or State Director for reinstatement. The Regional Administrator or State Director may reinstate the exclusion upon finding that the plant has returned to compliance with all conditions and that violations are not likely to recur.
- (10) EPA Hazardous Waste Nos. K060, K087, K141, K142, K143, K144, K145, K147,

and K148, and any wastes from the coke by-products processes that are hazardous only because they exhibit the Toxicity Characteristic (TC) specified in section 261.24 of this part when, subsequent to generation, these materials are recycled to coke ovens, to the tar recovery process as a feedstock to produce coal tar, or mixed with coal tar prior to the tar's sale or refining. This exclusion is conditioned on there being no land disposal of the wastes from the point they are generated to the point they are recycled to coke ovens or tar recovery or refining processes, or mixed with coal tar.

- (11) Nonwastewater splash condenser dross residue from the treatment of K061 in high temperature metals recovery units, provided it is shipped in drums (if shipped) and not land disposed before recovery.
- (12) (i) Oil-bearing hazardous secondary materials (i.e., sludges, byproducts, or spent materials) that are generated at a petroleum refinery (SIC code 2911) and are inserted into the petroleum refining process (SIC code 2911-including, but not limited to, distillation, catalytic cracking, fractionation, or thermal cracking units (i.e., cokers)) unless the material is placed on the land, or speculatively accumulated before being so recycled. Materials inserted into thermal cracking units are excluded under this paragraph, provided that the coke product also does not exhibit a characteristic of hazardous waste. Oil-bearing hazardous secondary materials may be inserted into the same petroleum refinery where they are generated, or sent directly to another petroleum refinery, and still be excluded under this provision. Except as provided in paragraph (a)(12)(ii) of this section, oil-bearing hazardous secondary materials generated elsewhere in the petroleum industry (i.e., from sources other than petroleum refineries) are not excluded under this section. Residuals generated from processing or recycling materials excluded under this paragraph (a)(12)(i), where such materials as generated would have otherwise met a listing under subpart D of this part, are designated as F037 listed wastes when disposed of or intended for disposal.

- (ii) Recovered oil that is recycled in the same manner and with the same conditions as described in paragraph (a)(12)(i) of this section. Recovered oil is oil that has been reclaimed from secondary materials (including wastewater) generated from normal petroleum industry practices, including refining, exploration and production, bulk storage, and transportation incident thereto (SIC codes 1311, 1321, 1381, 1382, 1389, 2911, 4612, 4613, 4922, 4923, 4789, 5171, and 5172.) Recovered oil does not include oil-bearing hazardous wastes listed in subpart D of this part; however, oil recovered from such wastes may be considered recovered oil. Recovered oil does not include used oil as defined in 40 CFR 279.1.
- (13) Excluded scrap metal (processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal) being recycled.
- (14) Shredded circuit boards being recycled provided that they are:
- (i) Stored in containers sufficient to prevent a release to the environment prior to recovery; and
- (ii) Free of mercury switches, mercury relays and nickel-cadmium batteries and lithium batteries.
- (15) Condensates derived from the overhead gases from kraft mill steam strippers that are used to comply with 40 CFR 63.446(e). The exemption applies only to combustion at the mill generating the condensates.
- (16) Comparable fuels or comparable syngas fuels (i.e., comparable/syngas fuels) that meet the requirements of \$261.38
- (17) Spent materials (as defined in §261.1) (other than hazardous wastes listed in subpart D of this part) generated within the primary mineral processing industry from which minerals, acids, cyanide, water, or other values are recovered by mineral processing or by beneficiation, provided that:
- (i) The spent material is legitimately recycled to recover minerals, acids, cyanide, water or other values;
- (ii) The spent material is not accumulated speculatively:
- (iii) Except as provided in paragraph (a)(17)(iv) of this section, the spent material is stored in tanks, containers, or buildings meeting the following min-

- imum integrity standards: a building must be an engineered structure with a floor, walls, and a roof all of which are made of non-earthen materials providing structural support (except smelter buildings may have partially earthen floors provided the secondary material is stored on the non-earthen portion), and have a roof suitable for diverting rainwater away from the foundation; a tank must be free standing, not be a surface impoundment (as defined in 40 CFR 260.10), and be manufactured of a material suitable for containment of its contents; a container must be free standing and be manufactured of a material suitable for containment of its contents. If tanks or containers contain any particulate which may be subject to wind dispersal, the owner/operator must operate these units in a manner which controls fugitive dust. Tanks, containers, and buildings must be designed, constructed and operated to prevent significant releases to the environment of these materials.
- (iv) The Regional Administrator or State Director may make a site-specific determination, after public review and comment, that only solid mineral processing spent material may be placed on pads rather than tanks containers, or buildings. Solid mineral processing spent materials do not contain any free liquid. The decisionmaker must affirm that pads are designed, constructed and operated to prevent significant releases of the secondary material into the environment. Pads must provide the same degree of containment afforded by the non-RCRA tanks, containers and buildings eligible for exclusion.
- (A) The decision-maker must also consider if storage on pads poses the potential for significant releases via groundwater, surface water, and air exposure pathways. Factors to be considered for assessing the groundwater, surface water, air exposure pathways are: The volume and physical and chemical properties of the secondary material, including its potential for migration off the pad; the potential for human or environmental exposure to hazardous constituents migrating from the pad via each exposure pathway, and the possibility and extent of harm to

human and environmental receptors via each exposure pathway.

- (B) Pads must meet the following minimum standards: Be designed of non-earthen material that is compatible with the chemical nature of the mineral processing spent material, capable of withstanding physical stresses associated with placement and removal, have run on/runoff controls, be operated in a manner which controls fugitive dust, and have integrity assurance through inspections and maintenance programs.
- (C) Before making a determination under this paragraph, the Regional Administrator or State Director must provide notice and the opportunity for comment to all persons potentially interested in the determination. This can be accomplished by placing notice of this action in major local newspapers, or broadcasting notice over local radio stations.
- (v) The owner or operator provides notice to the Regional Administrator or State Director providing the following information: The types of materials to be recycled; the type and location of the storage units and recycling processes; and the annual quantities expected to be placed in land-based units. This notification must be updated when there is a change in the type of materials recycled or the location of the recycling process.
- (vi) For purposes of paragraph (a)(7) of this section, mineral processing spent materials must be the result of mineral processing and may not include any listed hazardous wastes. Listed hazardous wastes and characteristic hazardous wastes and characteristic hazardous wastes generated by non-mineral processing industries are not eligible for the conditional exclusion from the definition of solid waste.
- (18) Petrochemical recovered oil from an associated organic chemical manufacturing facility, where the oil is to be inserted into the petroleum refining process (SIC code 2911) along with normal petroleum refinery process streams, provided:
- (i) The oil is hazardous only because it exhibits the characteristic of ignitability (as defined in §261.21) and/or toxicity for benzene (§261.24, waste code D018); and

- (ii) The oil generated by the organic chemical manufacturing facility is not placed on the land, or speculatively accumulated before being recycled into the petroleum refining process. An "associated organic chemical manufacturing facility" is a facility where the primary SIC code is 2869, but where operations may also include SIC codes 2821, 2822, and 2865; and is physically co-located with a petroleum refinery; and where the petroleum refinery to which the oil being recycled is returned also provides hydrocarbon feedstocks to the organic chemical manufacturing facility. "Petrochemical recovered oil" is oil that has been reclaimed from secondary materials (i.e., sludges, byproducts, or spent materials, including wastewater) from normal organic chemical manufacturing operations, as well as oil recovered from organic chemical manufacturing processes.
- (19) Spent caustic solutions from petroleum refining liquid treating processes used as a feedstock to produce cresylic or naphthenic acid unless the material is placed on the land, or accumulated speculatively as defined in §261.1(c).
- (b) Solid wastes which are not hazardous wastes. The following solid wastes are not hazardous wastes:
- (1) Household waste, including household waste that has been collected, transported, stored, treated, disposed, recovered (e.g., refuse-derived fuel) or reused. "Household waste" means any material (including garbage, trash and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds and day-use recreation areas). A resource recovery facility managing municipal solid waste shall not be deemed to be treating, storing, disposing of, or otherwise managing hazardous wastes for the purposes of regulation under this subtitle, if such facility:
 - (i) Receives and burns only
- (A) Household waste (from single and multiple dwellings, hotels, motels, and other residential sources) and
- (B) Solid waste from commercial or industrial sources that does not contain hazardous waste; and

- (ii) Such facility does not accept hazardous wastes and the owner or operator of such facility has established contractual requirements or other appropriate notification or inspection procedures to assure that hazardous wastes are not received at or burned in such facility.
- (2) Solid wastes generated by any of the following and which are returned to the soils as fertilizers:
- (i) The growing and harvesting of agricultural crops.
- (ii) The raising of animals, including animal manures.
- (3) Mining overburden returned to the mine site.
- (4) Fly ash waste, bottom ash waste, slag waste, and flue gas emission control waste, generated primarily from the combusion of coal or other fossil fuels, except as provided by §266.112 of this chapter for facilities that burn or process hazardous waste.
- (5) Drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil, natural gas or geothermal energy.
- (6)(1) Wastes which fail the test for the Toxicity Characteristic because chromium is present or are listed in subpart D due to the presence of chromium, which do not fail the test for the Toxicity Characteristic for any other constituent or are not listed due to the presence of any other constituent, and which do not fail the test for any other characteristic, if it is shown by a waste generator or by waste generators that:
- (A) The chromium in the waste is exclusively (or nearly exclusively) trivalent chromium; and
- (B) The waste is generated from an industrial process which uses trivalent chromium exclusively (or nearly exclusively) and the process does not generate hexavalent chromium; and
- (C) The waste is typically and frequently managed in non-oxidizing environments.
- (ii) Specific waste which meet the standard in paragraphs (b)(6)(i) (A), (B), and (C) (so long as they do not fail the test for the toxicity characteristic for any other constituent, and do not exhibit any other characteristic) are:

- (A) Chrome (blue) trimmings generated by the following subcategories of the leather tanning and finishing industry; hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.
- (B) Chrome (blue) shavings generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.
- (C) Buffing dust generated by the following subcategories of the leather tanning and finishing industry; hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue.
- (D) Sewer screenings generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/crome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.
- (E) Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.
- (F) Wastewater treatment sludes generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrometan/retan/wet finish; and through-the-blue.
- (G) Waste scrap leather from the leather tanning industry, the shoe manufacturing industry, and other leather product manufacturing industries.
- (H) Wastewater treatment sludges from the production of ${\rm TiO_2}$ pigment using chromium-bearing ores by the chloride process.
- (7) Solid waste from the extraction, beneficiation, and processing of ores and minerals (including coal, phosphate rock, and overburden from the mining of uranium ore), except as provided by §266.112 of this chapter for facilities that burn or process hazardous waste.

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- For purposes of $\S 261.4(b)(7)$ beneficiation of ores and minerals is restricted to the following activities: crushing; grinding; washing; dissolution; crystallization; filtration; sortsizing; drying; sintering; ing; pelletizing; briquetting; calcining to remove water and/or carbon dioxide; roasting. autoclaving, and/or chlorination in preparation for leaching (except where the roasting (and/or autoclaving and/or chlorination)/leaching sequence produces a final or intermediate product that does not undergo further beneficiation or processing); gravity concentration; magnetic separation; electrostatic separation; flotation; ion exchange; solvent extraction; electrowinning; precipitation; amalgamation; and heap, dump, vat, tank, and in situ leaching.
- (ii) For the purposes of §261.4(b)(7), solid waste from the processing of ores and minerals includes only the following wastes as generated:
- (A) Slag from primary copper processing:
- (B) Slag from primary lead processing;
- (C) Red and brown muds from bauxite refining;
- (D) Phosphogypsum from phosphoric acid production;
- (E) Slag from elemental phosphorus production:
- (F) Gasifier ash from coal gasification:
- (G) Process wastewater from coal gasification;
- (H) Calcium sulfate wastewater treatment plant sludge from primary copper processing;
- (I) Slag tailings from primary copper processing;
- (J) Fluorogypsum from hydrofluoric acid production;
- (K) Process wastewater from hydrofluoric acid production;
- (L) Air pollution control dust/sludge from iron blast furnaces;
 - (M) Iron blast furnace slag;
- (N) Treated residue from roasting/leaching of chrome ore;
- (O) Process wastewater from primary magnesium processing by the anhydrous process;
- (P) Process wastewater from phosphoric acid production;

- (Q) Basic oxygen furnace and open hearth furnace air pollution control dust/sludge from carbon steel production:
- (R) Basic oxygen furnace and open hearth furnace slag from carbon steel production;
- (S) Chloride process waste solids from titanium tetrachloride production:
- (T) Slag from primary zinc processing.
- (iii) A residue derived from co-processing mineral processing secondary materials with normal beneficiation raw materials or with normal mineral processing raw materials remains excluded under paragraph (b) of this section if the owner or operator:
- (A) Processes at least 50 percent by weight normal beneficiation raw materials or normal mineral processing raw materials; and,
- (B) Legitimately reclaims the secondary mineral processing materials.
- (8) Cement kiln dust waste, except as provided by §266.112 of this chapter for facilities that burn or process hazardous waste.
- (9) Solid waste which consists of discarded arsenical-treated wood or wood products which fails the test for the Toxicity Characteristic for Hazardous Waste Codes D004 through D017 and which is not a hazardous waste for any other reason if the waste is generated by persons who utilize the arsenical-treated wood and wood product for these materials' intended end use.
- (10) Petroleum-contaminated media and debris that fail the test for the Toxicity Characteristic of §261.24 (Hazardous Waste Codes D018 through D043 only) and are subject to the corrective action regulations under part 280 of this chapter.
- (11) Injected groundwater that is hazardous only because it exhibits the Toxicity Characteristic (Hazardous Waste Codes D018 through D043 only) in §261.24 of this part that is reinjected through an underground injection well pursuant to free phase hydrocarbon recovery operations undertaken at petroleum refineries, petroleum marketing terminals, petroleum bulk plants, petroleum pipelines, and petroleum transportation spill sites until January

- 25, 1993. This extension applies to recovery operations in existence, or for which contracts have been issued, on or before March 25, 1991. For groundwater returned through infiltration galleries from such operations at petroleum refineries, marketing terminals, and bulk plants, until [insert date six months after publication]. New operations involving injection wells (beginning after March 25, 1991) will qualify for this compliance date extension (until January 25, 1993) only if:
- (i) Operations are performed pursuant to a written state agreement that includes a provision to assess the groundwater and the need for further remediation once the free phase recovery is completed; and
- (ii) A copy of the written agreement has been submitted to: Waste Identification Branch (5304), U.S. Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460.
- (12) Used chlorofluorocarbon refrigerants from totally enclosed heat transfer equipment, including mobile air conditioning systems, mobile refrigeration, and commercial and industrial air conditioning and refrigeration systems that use chlorofluorocarbons as the heat transfer fluid in a refrigeration cycle, provided the refrigerant is reclaimed for further use.
- (13) Non-terne plated used oil filters that are not mixed with wastes listed in subpart D of this part if these oil filters have been gravity hot-drained using one of the following methods:
- (i) Puncturing the filter anti-drain back valve or the filter dome end and hot-draining;
 - (ii) Hot-draining and crushing;
 - (iii) Dismantling and hot-draining; or
- (iv) Any other equivalent hot-draining method that will remove used oil.
- (14) Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products.
- (15) Leachate or gas condensate collected from landfills where certain solid wastes have been disposed, provided that:
- (i) The solid wastes disposed would meet one or more of the listing descriptions for Hazardous Waste Codes K169, K170, K171, K172, K174, K175, K176, K177, and K178, if these wastes had been gen-

- erated after the effective date of the listing:
- (ii) The solid wastes described in paragraph (b)(15)(i) of this section were disposed prior to the effective date of the listing:
- (iii) The leachate or gas condensate do not exhibit any characteristic of hazardous waste nor are derived from any other listed hazardous waste:
- (iv) Discharge of the leachate or gas condensate, including leachate or gas condensate transferred from the landfill to a POTW by truck, rail, or dedicated pipe, is subject to regulation under sections 307(b) or 402 of the Clean Water Act.
- (v) As of February 13, 2001, leachate or gas condensate derived from K169-K172 is no longer exempt if it is stored or managed in a surface impoundment prior to discharge. After November 21, 2003, leachate or gas condensate derived from K176, K177, and K178 will no longer be exempt if it is stored or managed in a surface impoundment prior to discharge. There is one exception: if the surface impoundment is used to temporarily store leachate or gas condensate in response to an emergency situation (e.g., shutdown of wastewater treatment system), provided the impoundment has a double liner, and provided the leachate or gas condensate is removed from the impoundment and continues to be managed in compliance with the conditions of this paragraph (b)(15)(v) after the emergency ends.
- (16) Sludges resulting from the treatment of wastewaters (not including spent plating solutions) generated by the copper metallization process at the International Business Machines Corporation (IBM) semiconductor manufacturing facility in Essex Junction, VT, are exempt from the F006 listing, provided that:
- (i) IBM provides the Agency with semi-annual reports (by January 15 and July 15 of each year) detailing constituent analyses measuring the concentrations of volatiles, semi-volatiles, and metals using methods presented in part 264, appendix IX of this chapter of both the plating solution utilized by, and the rinsewaters generated by, the copper metallization process;
- (ii) IBM provides the agency with semi-annual reports (by January 15 and

July 15 of each year), through the year 2004, or when IBM has achieved its facility-wide goal of a 40% reduction in greenhouse gas emissions from a 1995 base year (when normalized to production), whichever is first, that contain the following:

- (A) Estimated greenhouse gas emissions, and estimated greenhouse gas emission reductions. Greenhouse gas emissions will be reported in terms of total mass emitted and mass emitted normalized to production; and
- (B) The number of chemical vapor deposition chambers used in the semi-conductor manufacturing production line that have been converted to either low flow C_2F_6 or NF_3 during the reporting period and the number of such chambers remaining to be converted to achieve the facility goal for global warming gas emission reductions.
- (iii) No significant changes are made to the copper metallization process such that any of the constituents listed in 40 CFR part 261, appendix VII as the basis for the F006 listing are introduced into the process.
 - (17) [Reserved]
- (18) By-products resulting from the production of automobile air bag gas generants at the Autoliv ASP Inc. facility in Promontory Utah, (Autoliv) are exempt from the D003 listing, for a period of five years from May 9, 2001, provided that:
- (i) The by-product gas generants are processed on-site in Autoliv's Metal Recovery Furnace (MRF).
- (A) By-product gas generants must only be fed to the MRF when it is operating in conformance with the State of Utah, Division of Air Quality's Approval Order DAQE-549-97.
- (B) Combustion gas temperature must be maintained below 400 degrees Fahrenheit at the baghouse inlet.
- (ii) Prior to processing in the MRF, the by-product gas generants are managed in accordance with the requirements specified in 40 CFR 262.34.
- (iii) The Autoliv facility and the MRF are operated and managed in accordance with the requirements of 40 CFR Part 265, Subparts B, C, D, E, G, H, I, and O.
- (iv) Residues derived from the processing of by-product gas generants in the MRF are managed in accordance

- with the requirements specified in 40 CFR Parts 262 and 268.
- (v) The following testing of the MRF's stack gas emissions is conducted:
- (A) An initial test shall be conducted within 30 operating days of starting feed of by-product gas generants to the MRF. EPA may extend this deadline, at the request of Autoliv, when good cause is shown. The initial test shall consist of three duplicate runs sampling for:
- (1) Particulate matter using Method 5 as specified in 40 CFR Part 60, Appendix A
- (2) The metals Aluminum, Arsenic, Barium, Beryllium, Boron, Cadmium, Chromium, Cobalt, Copper, Lead, and Nickel using Method 29 as specified in 40 CFR Part 60, Appendix A.
- (3) Polychlorinated di-benzo dioxins and furans using Method 23 0023A as specified in 40 CFR Part 60, Appendix A.
- (4) Carbon monoxide using Method 10 as specified in 40 CFR Part 60, Appendix A.
- (B) After the initial test is completed, an annual stack test (12 months from the previous initial stack test) of the MRF shall be conducted. The annual tests shall consist of three duplicate runs using Method 29 and Method 5 as specified in 40 CFR Part 60, Appendix A
- (C) Testing shall be conducted while by-product gas generants are fed to the MRF at no less than 90% of the planned maximum feed rate, and with the MRF operating parameters within normal ranges.
- (D) Initial stack testing results and additional project performance data and information, including the quantity of by-product gas generants processed and the operating parameter values during the test runs, will be submitted by Autoliv to the State of Utah and EPA within 60 days of the completion of the initial stack test.
- (E) Annual stack test results and additional project performance data and information, including the quantity of by-product gas generants processed and the operating parameter values during the test runs, will be submitted by Autoliv to EPA and the State of Utah

within 60 days of the completion of the annual test.

- (vi) Combustion gas discharged to the atmosphere from the MRF meets the following limits:
- (A) Dioxin emissions do not exceed 0.4 ng per dry standard cubic meter on a toxicity equivalent quotient (TEQ) basis corrected to 7% Oxygen.
- (B) Combined lead and cadmium emissions do not exceed 240 ug per dry standard cubic meter corrected to 7%
- (C) Combined arsenic, beryllium, and chromium emissions do not exceed 97 ug per dry standard cubic meter corrected to 7% Oxygen.
- (D) Particulate matter emissions do not exceed 34 mg per dry standard cubic meter corrected to 7% Oxygen.
- (E) If the limits specified in paragraphs (b)(18)(vi)(A) through (D) of this section are exceeded, Autoliv shall discontinue feeding gas generants to the MRF until such time as Autoliv can demonstrate to EPA and the state of Utah satisfaction that the MRF combustion gas emissions can meet the specified in paragraphs limits (b)(18)(vi) (A) through (D) of this section
- (vii) No by-product gas generants or other pyrotechnic wastes generated offsite will be received at the Autoliv facility in Promontory, Utah or processed in the MRF unless otherwise allowed by law (permit or regulation).
- (viii) Autoliv will provide EPA and the state of Utah with semi-annual reports (by January 30 and July 30 of each year).
- (A) The semi-annual reports will document the amounts of by-product gas generants processed during the reporting period.
- (B) The semi-annual reports will provide a summary of the MRF Operating Record during the reporting period, including information on by-product gas generant composition, average feed rates, upset conditions, and spills or releases.
- (ix) No significant changes are made to the operating parameter production values of Autoliv's production of air bag gas generants such that any of the constituents listed in appendix VIII of this part are introduced into the proc-

- (x) Autoliv reports to the EPA any noncompliance which may endanger health or the environment orally within 24 hours from the time Autoliv becomes aware of the circumstances, including:
- (A) Any information of a release, discharge, fire, or explosion from the MRF, which could threaten the environment or human health.
- (B) The description of the occurrence and its cause shall include:
- (1) Name, address, and telephone number of the facility;
 - (2) Date, time, and type of incident;
- (3) Name and quantity of material(s) involved:
 - (4) The extent of injuries, if any;
- (5) An assessment of actual or potential hazards to the environment and human health, and
- (6) Estimated quantity and disposition of recovered material that resulted from the incident.
- (C) A written notice shall also be provided within five days of the time Autoliv becomes aware of the circumstances. The written notice shall contain a description of the non-compliance and its cause; the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The EPA may waive the five day written notice requirement in favor of a written report within fifteen days.
- (xi) Notifications and submissions made under paragraph (b)(18) of this section shall be sent to the Regional Assistant Administrator for the Office of Partnerships and Regulatory Assistance, U.S. EPA, Region 8 and the Executive Secretary of the Utah Solid and Hazardous Waste Control Board.
- (c) Hazardous wastes which are exempted from certain regulations. A hazardous waste which is generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit or an associated non-waste-treatment-manufacturing unit, is not subject to regulation under

parts 262 through 265, 268, 270, 271 and

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124 of this chapter or to the notification requirements of section 3010 of RCRA until it exits the unit in which it was generated, unless the unit is a surface impoundment, or unless the hazardous waste remains in the unit more than 90 days after the unit ceases to be operated for manufacturing, or for storage or transportation of product or raw materials.

- (d) Samples. (1) Except as provided in paragraph (d)(2) of this section, a sample of solid waste or a sample of water, soil, or air, which is collected for the sole purpose of testing to determine its characteristics or composition, is not subject to any requirements of this part or parts 262 through 268 or part 270 or part 124 of this chapter or to the notification requirements of section 3010 of RCRA, when:
- (i) The sample is being transported to a laboratory for the purpose of testing; or
- (ii) The sample is being transported back to the sample collector after testing; or
- (iii) The sample is being stored by the sample collector before transport to a laboratory for testing; or
- (iv) The sample is being stored in a laboratory before testing; or
- (v) The sample is being stored in a laboratory after testing but before it is returned to the sample collector; or
- (vi) The sample is being stored temporarily in the laboratory after testing for a specific purpose (for example, until conclusion of a court case or enforcement action where further testing of the sample may be necessary).
- (2) In order to qualify for the exemption in paragraphs (d)(1) (i) and (ii) of this section, a sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector must:
- (i) Comply with U.S. Department of Transportation (DOT), U.S. Postal Service (USPS), or any other applicable shipping requirements; or
- (ii) Comply with the following requirements if the sample collector determines that DOT, USPS, or other shipping requirements do not apply to the shipment of the sample:
- (A) Assure that the following information accompanies the sample:

- (1) The sample collector's name, mailing address, and telephone number;
- (2) The laboratory's name, mailing address, and telephone number;
 - (3) The quantity of the sample;
 - (4) The date of shipment; and
 - (5) A description of the sample.
- (B) Package the sample so that it does not leak, spill, or vaporize from its packaging.
- (3) This exemption does not apply if the laboratory determines that the waste is hazardous but the laboratory is no longer meeting any of the conditions stated in paragraph (d)(1) of this section.
- (e) Treatability Study Samples. (1) Except as provided in paragraph (e)(2) of this section, persons who generate or collect samples for the purpose of conducting treatability studies as defined in section 260.10, are not subject to any requirement of parts 261 through 263 of this chapter or to the notification requirements of Section 3010 of RCRA, nor are such samples included in the quantity determinations of §261.5 and §262.34(d) when:
- (i) The sample is being collected and prepared for transportation by the generator or sample collector; or
- (ii) The sample is being accumulated or stored by the generator or sample collector prior to transportation to a laboratory or testing facility; or
- (iii) The sample is being transported to the laboratory or testing facility for the purpose of conducting a treatability study.
- (2) The exemption in paragraph (e)(1) of this section is applicable to samples of hazardous waste being collected and shipped for the purpose of conducting treatability studies provided that:
- (i) The generator or sample collector uses (in "treatability studies") no more than 10,000 kg of media contaminated with non-acute hazardous waste, 1000 kg of non-acute hazardous waste other than contaminated media, 1 kg of acute hazardous waste, 2500 kg of media contaminated with acute hazardous waste for each process being evaluated for each generated waste stream; and
- (ii) The mass of each sample shipment does not exceed 10,000 kg; the 10,000 kg quantity may be all media

contaminated with non-acute hazardous waste, or may include 2500 kg of media contaminated with acute hazardous waste, 1000 kg of hazardous waste, and 1 kg of acute hazardous waste; and

- (iii) The sample must be packaged so that it will not leak, spill, or vaporize from its packaging during shipment and the requirements of paragraph A or B of this subparagraph are met.
- (A) The transportation of each sample shipment complies with U.S. Department of Transportation (DOT), U.S. Postal Service (USPS), or any other applicable shipping requirements; or
- (B) If the DOT, USPS, or other shipping requirements do not apply to the shipment of the sample, the following information must accompany the sample:
- (1) The name, mailing address, and telephone number of the originator of the sample;
- (2) The name, address, and telephone number of the facility that will perform the treatability study;
 - (3) The quantity of the sample;
 - (4) The date of shipment; and
- (5) A description of the sample, including its EPA Hazardous Waste Number.
- (iv) The sample is shipped to a laboratory or testing facility which is exempt under §261.4(f) or has an appropriate RCRA permit or interim status.
- (v) The generator or sample collector maintains the following records for a period ending 3 years after completion of the treatability study:
- (A) Copies of the shipping documents;
- (B) A copy of the contract with the facility conducting the treatability study;
 - (C) Documentation showing:
- (1) The amount of waste shipped under this exemption;
- (2) The name, address, and EPA identification number of the laboratory or testing facility that received the waste:
- (3) The date the shipment was made; and
- (4) Whether or not unused samples and residues were returned to the generator.
- (vi) The generator reports the information required under paragraph

(e)(v)(C) of this section in its biennial report.

- (3) The Regional Administrator may grant requests on a case-by-case basis for up to an additional two years for treatability studies involving bioremediation. The Regional Administrator may grant requests on a case-by-case basis for quantity limits in excess of those specified in paragraphs (e)(2) (i) and (ii) and (f)(4) of this section, for up to an additional 5000 kg of media contaminated with non-acute hazardous waste, 2500 kg of non-acute hazardous waste, 2500 kg of media contaminated with acute hazardous waste and 1 kg of acute hazardous waste:
- (i) In response to requests for authorization to ship, store and conduct treatabilty studies on additional quantities in advance of commencing treatability studies. Factors to be considered in reviewing such requests include the nature of the technology, the type of process (e.g., batch versus continuous), size of the unit undergoing testing (particularly in relation to scale-up considerations), the time/quantity of material required to reach steady state operating conditions, or test design considerations such as mass balance calculations
- (ii) In response to requests for authorization to ship, store and conduct treatability studies on additional quantities after initiation or completion of initial treatability studies, when: There has been an equipment or mechanical failure during the conduct of a treatability study; there is a need to verify the results of a previously conducted treatability study; there is a need to study and analyze alternative techniques within a previously evaluated treatment process; or there is a need to do further evaluation of an ongoing treatability study to determine final specifications for treatment.
- (iii) The additional quantities and timeframes allowed in paragraph (e)(3) (i) and (ii) of this section are subject to all the provisions in paragraphs (e) (1) and (e)(2) (iii) through (vi) of this section. The generator or sample collector must apply to the Regional Administrator in the Region where the sample is collected and provide in writing the following information:

- (A) The reason why the generator or sample collector requires additional time or quantity of sample for treatability study evaluation and the additional time or quantity needed:
- (B) Documentation accounting for all samples of hazardous waste from the waste stream which have been sent for or undergone treatability studies including the date each previous sample from the waste stream was shipped, the quantity of each previous shipment, the laboratory or testing facility to which it was shipped, what treatability study processes were conducted on each sample shipped, and the available results on each treatability study;
- (C) A description of the technical modifications or change in specifications which will be evaluated and the expected results;
- (D) If such further study is being required due to equipment or mechanical failure, the applicant must include information regarding the reason for the failure or breakdown and also include what procedures or equipment improvements have been made to protect against further breakdowns; and
- (E) Such other information that the Regional Administrator considers necessary.
- (f) Samples Undergoing Treatability Studies at Laboratories and Testing Facilities. Samples undergoing treatability studies and the laboratory or testing facility conducting such treatability studies (to the extent such facilities are not otherwise subject to RCRA requirements) are not subject to any requirement of this part, part 124, parts 262-266, 268, and 270, or to the notification requirements of Section 3010 of RCRA provided that the conditions of paragraphs (f) (1) through (11) of this section are met. A mobile treatment unit (MTU) may qualify as a testing facility subject to paragraphs (f) (1) through (11) of this section. Where a group of MTUs are located at the same site, the limitations specified in (f) (1) through (11) of this section apply to the entire group of MTUs collectively as if the group were one MTU.
- (1) No less than 45 days before conducting treatability studies, the facility notifies the Regional Administrator, or State Director (if located in an authorized State), in writing that it

- intends to conduct treatability studies under this paragraph.
- (2) The laboratory or testing facility conducting the treatability study has an EPA identification number.
- (3) No more than a total of 10,000 kg of "as received" media contaminated with non-acute hazardous waste, 2500 kg of media contaminated with acute hazardous waste or 250 kg of other "as received" hazardous waste is subject to initiation of treatment in all treatability studies in any single day. "As received" waste refers to the waste as received in the shipment from the generator or sample collector.
- (4) The quantity of "as received" hazardous waste stored at the facility for the purpose of evaluation in treatability studies does not exceed 10,000 kg, the total of which can include 10,000 kg of media contaminated with non-acute hazardous waste, 2500 kg of media contaminated with acute hazardous waste, 1000 kg of non-acute hazardous wastes other than contaminated media, and 1 kg of acute hazardous waste. This quantity limitation does not include treatment materials (including nonhazardous solid waste) added to "as received" hazardous waste.
- (5) No more than 90 days have elapsed since the treatability study for the sample was completed, or no more than one year (two years for treatability studies involving bioremediation) have elapsed since the generator or sample collector shipped the sample to the laboratory or testing facility, whichever date first occurs. Up to 500 kg of treated material from a particular waste stream from treatability studies may be archived for future evaluation up to five years from the date of initial receipt. Quantities of materials archived are counted against the total storage limit for the facility.
- (6) The treatability study does not involve the placement of hazardous waste on the land or open burning of hazardous waste.
- (7) The facility maintains records for 3 years following completion of each study that show compliance with the treatment rate limits and the storage

time and quantity limits. The following specific information must be included for each treatability study conducted:

- (i) The name, address, and EPA identification number of the generator or sample collector of each waste sample;
- (ii) The date the shipment was received;
- (iii) The quantity of waste accepted;
- (iv) The quantity of "as received" waste in storage each day;
- (v) The date the treatment study was initiated and the amount of "as received" waste introduced to treatment each day:
- (vi) The date the treatability study was concluded:
- (vii) The date any unused sample or residues generated from the treatability study were returned to the generator or sample collector or, if sent to a designated facility, the name of the facility and the EPA identification number.
- (8) The facility keeps, on-site, a copy of the treatability study contract and all shipping papers associated with the transport of treatability study samples to and from the facility for a period ending 3 years from the completion date of each treatability study.
- (9) The facility prepares and submits a report to the Regional Administrator, or State Director (if located in an authorized State), by March 15 of each year that estimates the number of studies and the amount of waste expected to be used in treatability studies during the current year, and includes the following information for the previous calendar year:
- (i) The name, address, and EPA identification number of the facility conducting the treatability studies;
- (ii) The types (by process) of treatability studies conducted;
- (iii) The names and addresses of persons for whom studies have been conducted (including their EPA identification numbers):
- (iv) The total quantity of waste in storage each day;
- (v) The quantity and types of waste subjected to treatability studies;
- (vi) When each treatability study was conducted:

- (vii) The final disposition of residues and unused sample from each treatability study.
- (10) The facility determines whether any unused sample or residues generated by the treatability study are hazardous waste under §261.3 and, if so, are subject to parts 261 through 268, and part 270 of this chapter, unless the residues and unused samples are returned to the sample originator under the §261.4(e) exemption.
- (11) The facility notifies the Regional Administrator, or State Director (if located in an authorized State), by letter when the facility is no longer planning to conduct any treatability studies at the site.
- (g) Dredged material that is not a hazardous waste. Dredged material that is subject to the requirements of a permit that has been issued under 404 of the Federal Water Pollution Control Act (33 U.S.C.1344) or section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1413) is not a hazardous waste. For this paragraph (g), the following definitions apply:
- (1) The term *dredged material* has the same meaning as defined in 40 CFR 232.2:
 - (2) The term permit means:
- (i) A permit issued by the U.S. Army Corps of Engineers (Corps) or an approved State under section 404 of the Federal Water Pollution Control Act (33 U.S.C. 1344):
- (ii) A permit issued by the Corps under section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1413); or
- (iii) In the case of Corps civil works projects, the administrative equivalent of the permits referred to in paragraphs (g)(2)(i) and (ii) of this section, as provided for in Corps regulations (for example, see 33 CFR 336.1, 336.2, and 337.6).

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EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §261.4, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and on GPO Access.