CleanEarth

CCORCE PROFILE WORKSHEET REFERENCE GUIDANCE

SECTION A: GENERATOR / CUSTOMER INFORMATION

General Instructions: Properly fill out all fields in the Generator and Customer Sections. Care should be taken to all the information in the Generator Section as it has major impact on the regulatory components of the waste profile as well as how the material is managed.

SECTION B: WASTE INFORMATION

- 1. Waste Common Name: This is a common name for the waste stream. Ideally, this should be a waste stream name that can be easily identified by the generator and drivers alike. If possible, the waste name should answer what process generated the waste, what makes the waste hazardous, identify it is an unused material.
 - a. The waste name should adequately describe the waste and avoid product names/numbers. "Sludge" is not acceptable, but "Sludge contaminated with gasoline and water" is acceptable. "Debris" is not acceptable, but "Debris contaminated with oil and grease" is acceptable. It is very informative to tie the waste name to the process. Use "Filter Cake from treating plating rinse water" rather than "Filter cake", or even "Filter cake from plating process". There may not always be a process- based waste name so choose a name that is as descriptive as possible. For a generic group of waste, the waste name should still be specific, i.e. Flammable, Toxic Pharmaceuticals (Spent) to understand the family and hazards associated with the waste material. Avoid using "Lab Pack" in the name as lab packs are approved under a different process and require packing slip(s) with the drum(s). "Loosepacks" are an acceptable part of the waste name.
- 2. Process Generating Waste: Be as descriptive as possible on the process especially due to F & K code designation. If the material contains sharps, biological derived materials (i.e. toxins from living sources, specimens, tissues) or from a facility that manages medical waste, a non-infectious certificate may be required. Material from an APHIS facility must be clear in the process that it is not APHIS waste (confiscated/collected biological samples/specimens and garbage) but chemicals used at the facility for normal maintenance and laboratory uses. See RCRA code list for further info.
 - a. F-listed processes are from non-Specific sources that consist of seven groups: 40CFR 261.31 F-codes
 - Spent solvent waste
 - Electroplating and other metal finishing wastes
 - Dioxin-containing wastes
 - Chlorinated aliphatic hydrocarbons production waste, i.e. methylene chloride, trichloroethylene
 - Wood preserving wastes
 - Petroleum refinery wastewater treatment sludges
 - Multi-source leachate, i.e. landfill leachate
 - b. K-listed processes are from specific industry sources. If they manufacture any of the materials listed below, there is a chance it could be K-listed waste. 40CFR 261.32 K-codes
 - Wood preservation
 - Organic chemicals
 - Pesticides
 - Petroleum refining
 - Ink formulation
 - Coking
 - Veterinary Pharmaceuticals
 - Inorganic pigments
 - Inorganic chemicals
 - Explosives
 - Iron and Steel
 - Primary aluminum
 - Secondary lead

- 3. Source Code: Refers to the EPA Source Codes (G codes) used in biennial reporting. It is a code that represents a specific type of waste and the activity generating it. The code description should be similar to the <u>Process Generating Waste</u> <u>Description</u>. See EPA Management Codes List.
- 4. Form Code: Refers to the EPA Form Codes (W codes) used in biennial reporting. It is a code describing the general physical and chemical characteristics of the hazardous waste. Should mirror some of the analytical, i.e. W103 Spent concentrated acid (5% or more) which in turn would have a pH of < 4 and the chemical composition would list an acid > 5%. See EPA Management Codes List.
- 5. Origin Code: EPA Origin Codes are associated with process/activity at a site that generated the waste. Select the appropriate value.
- 6. Unused Commercial Chemical Product: This helps determine if the material is considered P- or U- listed. If a sole active ingredient is identified, then it should be noted in the chemical constituents. See RCRA code list. If "Yes", then should be able to provide an SDS. See 40CFR 261.33 P- and U-codes.
- 7. Spill Residue: If the material is a spill cleanup, then note "Yes". A P- or U-listed code could still apply if the unused product had a listed sole active ingredient and was spilled. See Unused Commercial Product description for reference for P-and U-codes.
- 8. Loosepack: Refers to drum packed with inner containers of same product, i.e., consumer product packaging was damaged and then overpacked into a drum. Chemical constituents and inner container sizes are important for process code determination. Some materials will require absorbent sufficient to absorb all the liquid. Inner containers must be 5-gallons or less.
- 9. Lab Pack: Refers to drum packed with inner containers of different compatible products. Lab Packs should be managed under the lab pack approval process, and the containers must have packing slip(s).
- **10. Analysis:** Check this box if any analysis is submitted with the profile. Refer to this analytical when completing any analytical values and chemical composition. Analytical results are used for characteristic D-codes. Important conversion for the profile is 10,000ppm equals 1%. See the Analytical Key in the Facility Summary section for more details. Analytical is typically required for processed waste.
 - a. The analytical cannot exceed four (4) years old.
- **11. Formulary:** Check this box if a Formulary or Pharmaceutical checklist is being supplied. A "classified" Formulary is a purchase history of pharmaceuticals. Once classified, it provides us with the Chemical Composition (pharmaceuticals), as well as applicable RCRA and State Waste codes for those pharmaceuticals.
- **12. SDS:** Check this box if a SDS is being used to support the information being supplied in the Waste Profile.
 - a. Any commercial product requires an SDS. The generator should have a copy based on Emergency Planning and Community Right-to-Know for its employees to access. If not, the internet could help as well as contacting the manufacturer of the product.
 - **b.** The SDS can answer a lot of the questions required for a profile, but they also can be deceiving. You may see a non-RCRA or limited quantity DOT shipping name when it might be EPA and DOT hazardous for our purposes. Analytical is the driving factor for DOT and EPA determination. Always review the whole document, but here are the key sections and potential information to be found.
 - Section 1 Identification: Name of product to be used potentially in Waste Common Name. Sometimes the chemical family is noted to assist with the chemical composition.
 - Section 2 Hazard Identification: The pictograms give insight into potential characteristics, i.e. flammable or oxidizer symbol or even lists it out," Flammable liquid and vapor". Some special information is noted at the bottom of this section, i.e. Radioactive, contact with acid releases toxic gas, or Reacts violently with water.

- Section 3 Chemical Composition: If the chemical composition is not listed, incomplete or they note trade secret, then look at sections 14 and 15 as well. They sometimes report some constituents as per DOT and certain state regulations.
- Section 5 Fire Fighting Measures: Flash point is sometimes noted here if not in Section 9.
- Section 7 Handling and Storage: Sometimes you will find SADT (Self-Accelerating Decomposition Temperature) information here. Anything <122 F is not accepted and some locations it is even higher.
- Section 9 Physical and chemical properties: Largest section for analytical information for the various data points in the profile.
- Section 10 Stability and reactivity: This section helps with reactivity(D003) assignment. Look at conditions to avoid and incompatible materials, i.e. Reacts violently with water(D003), incompatible with organic material (Potential oxidizer). If you are given a generic DOT corrosive PSN (i.e. UN1760), look to see if is incompatible with acid or base. If acid, then it is basic (pH>10). If base, then it is acidic (pH<3). If both, it may be corrosive to skin and not meet the EPA definition.
- Section 11 Toxicological information & 12 Ecological information: LD50/LC50information are used to help determine 6.1 DOT classification (LD50 oral <300 ppm typically requires a 6.1 PSN). It is also used in certain states, i.e. MN and WA, for certain state waste codes.
- Section 11 Toxicological information & 12 Ecological information: LD50/LC50information are used to help determine 6.1 DOT classification (LD50 oral <300 ppm typically requires a 6.1 PSN). It is also used in certain states, i.e. MN and WA, for certain state waste codes.
- Section 13 Disposal Considerations: This is typically generic and does not give any real guidance. Sometimes they list RCRA codes, but these are typically completed by people not familiar with RCRA regulations. Review but let the other info drive the waste determination.
- Section 14 Transportation information: As noted above, the PSN noted may not always be correct for how we
 manage it. In some cases, we utilize limited quantity if all the material is in its original packaging and we are shipping as is. When the material is not or will be repackaged by our personnel, it will most likely require a different
 PSN if found to be hazardous.
- Section 15 Regulatory information: Sometimes RCRA info is noted here as well. Same guidance as with the disposal section (sec 13). Sometimes parts of the chemical composition are noted here by certain state regulations. TRI (SARA Title III, section 313) is also listed here.
- **13. Sample:** Check this box if a sample was supplied to Clean Earth for a treatability study or other reason. If a sample was provided, make sure all analytical results are utilized to properly fill out the profile and are also attached to the profile as supporting documentation.

SECTION C: PHYSICAL CHARACTERISTICS OF WASTE

- 1. Layers: Total number of layers in the waste stream regardless of phase (solid or liquid). Ex. Oil and water are both liquid phases, but they form 2 layers, oil/water/sludge- 3(multi) layers, PPE/solids/debris- 1 layer, not multilayer since it is all one distinct physical state.
- 2. Solid %: The amount of Solids within the waste stream that cannot be pumped or poured off but instead must be dumped or physically extracted.
- 3. Sludge %: The amount of Sludge within the waste stream that is still pumpable but not a free liquid. The amount of sludge in some cases can be a price-point issue.
- 4. Free Liquid %: The amount of liquid within the waste stream that could be pumped or poured off. Inner containers containing liquid would not be considered free liquid, since it could not be readily pumped or poured off without further action. The layer, Physical State(phase), pumpable and even chemical constituents should correspond with this value. The free liquid range needs to be broad enough to allow flexibility in the waste. If the "physical state" entry indicates there is sludge in a liquid, it cannot be 100% free liquid. If there is no free liquid, enter "none" or "0%". DOT proper shipping name (PSN) must also agree with free liquid present or inner containers (Lab Pack and loosepack) phase. Any free liquid or phase would prompt a liquid DOT PSN.
- Powder / Monolith / Debris / Compressed Gas: If the material is not a Liquid/Solid/Sludge, then choose the alternate physical state from these options.
- 6. Specific Gravity: Water is 1.0, so liquids (i.e. oil, gasoline) or solids (i.e. pumice) that float on water are <1.0 and items heavier than water for liquids (i.e. chlorinated solvents) and solids (i.e. soil, metal) are >1.0. Always note the actual value if known from a SDS or chemical property. Examples are:

Solvent: 0.7-0.9	Oil: 0.8-1.0
Water: 1.0-1.1	Acids: 1.0-1.4
Oil sludge: 0.9-1.2	Filter cake: 1.1-1.4

- 7. Viscosity: Select the proper viscosity (thickness) of the waste based on knowledge or backup documentation.
- 8. Water %: The value should correspond to the chemical composition and actual test results. This comes into play regulatory wise if the waste stream also contains Benzene.
- 9. **Pumpable:** The layers, physical state, viscosity, % free liquid, chemical constituents all factor into this and are all inter-related. Must have >50% free liquids to be considered pumpable.
- **10.** Color: Describe the color of the waste. If two (2) layers, note both (i.e. Brown/Clear). This does not have to be exact. Color is often indicated on a SDS. If the color will vary, such as with paints, indicate the color as "varies".
- 11. Odor: A general strength of the odor, if known. If you have a sample or onsite, do not purposefully inhale. If a noticeable odor is emitting, then note the strength. Most waste should be indicated as none or mild. Most organic containing waste should be mild unless it is known to be a strong odor, such as from mercaptans, amines, etc. Indicate concentrated acids, ammonia, sulfides, etc. as strong. Often the odor is indicated on the SDS.
- 12. Odor Description: A general description of the odor. If MILD or STRONG is selected for odor, then a description should be noted to the best of your ability or refer to the SDS or generator's knowledge to assess strength and identification, i.e. solvents as "solvent"; acids as "pungent" or "irritating"; and ammonia as "ammonia" or "irritating"; amines as "stinky", "ammoniacal", or "amine", etc.

- 13. pH (Corrosivity): Note the actual value or range or select the range that captures the value from analytical or SDS. If the pH is ≤2 or ≥12.5 in a liquid phase, then a RCRA code D002 should apply unless there is an exemption, exception, or exclusion (i.e. recycle, VSQG). Solids do not get D002 regardless of pH. See 40 CFR 261.22. (40CFR 261.22 Corrosivity)
- 14. Flash Point °F: Note the actual value or range or select the range that captures the value from analytical, SDS or Generator Knowledge. If a result of <140F, RCRA code D001 should apply unless there is an exemption, exception, or exclusion (i.e. recycle, VSQG). See 40 CFR 261.21 (40CFR 261.21 Ignitability). If you know the waste is ignitable, but have no other knowledge, enter "73-140". If there is knowledge, based on SDS, technical data or analysis, that the flashpoint is <73, enter it as "<73" because that is a determinant for the DOT packing group.</p>
- **15. BTU/LB:** Based on an actual test, but below are some BTU values for some common things to give a better understanding. The BTU/lb information is required by 40 CFR 264 Subpart O.

Some typical BTU Values:

Chlorinated solvents Glycols Resins (variable by resin type) Primary Alcohols & Ketones Amines Aliphatic & Aromatic hydrocarbons Oil Esters of Fatty Acids	< 2,000 BTU/lb 6 - 8,000 BTU/lb 6 - 12,000 BTU/lb 8,000 BTU/lb 8 - 14,000 BTU/lb 16 - 18,000 BTU/lb ~ 18,000 BTU/lb 20,000 BTU/lb
Isocyanates	20,000 BT0/lb 20 - 22,000 BTU/lb

- 16. Boiling Point: Besides indicating the physical state (liquid or gas) of a substance at ambient or room temperature, boiling point serves as an indicator of volatility even for laymen, with higher boiling points indicating lower volatility. The boiling point is a key input in equations that provide estimates of a chemical's vapor pressure. Knowing the boiling point of a chemical is also very important for its storage & transport. You probably do not want to store or transport a liquid at a temperature close to or above its boiling point in which case the boiling may cause leaking and severe consequences. Boiling point test is not required for every chemical. Under EU REACH, boiling point test is not required for gases, or for solids which either melt above 300 °C or decompose before boiling.
- **17. % Halogens:** Represents elements from the Group VII A Periodic table (Bromine, Chlorine, Fluorine, Iodine, and Astatine). This should correspond to the chemical constituents and analytical testing. Select the appropriate range. This has relevance for the fuels blending process codes and incinerator feed limits.

SECTION D: CHEMICAL COMPOSITION OF WASTE

General Instructions: All known constituents should be included in the Chemical Composition, along with a range as appropriate. The sum of all concentrations must be at least 100%. Ranges should be realistic and "0-100%" is not useful information, unless dealing with a mixture of a family, i.e., butyl alcohols (n-butanol (U031), isobutanol (U140), tert-butanol). Unit measurement should be in scale with amount of a constituent. A constituent that is present at 10 ppm (parts per million) should not be listed as <1% but instead 10-20 ppm. If trade or formula names are used, also identify the chemical constituents. List every constituent that affects the designation of the waste (ex. Dirt >99%, Gasoline <1% is acceptable); metals may be spelled out or just listed in the metals section. Complete the Constituents information for each chemical compound or other physical constituent. SDS provides this information in section 3 and sometimes mentioned in section 1, 14 & 15 when not specifically stated in section 3. Section 1 may need to be used as a generic family, but analytical may be required to better clarify the chemical composition. If this section does not meet 100% or not descriptive enough to specific constituents, an incineration process code will be applied.

****NOTE** TACOMA FACILITY REQUIREMENT:** Chemical composition should only include those items contained in the waste stream and item range cannot have a "0" as the minimum or "100" for the maximum if more than one item.

TRI Chemicals: The waste stream is subject to Toxic Release Inventory Reporting if it contains a Section 313 Toxic Chemical and meets Qualifier requirements. For SDS', section 15 will sometimes list SARA Title III, Section 313 compounds and their %. See RCRA/TRI/RQ list. The compounds meeting this criteria should be marked accordingly.

SECTION E: ADDITIONAL INFORMATION

- 1. PCB (Polychlorinated Biphenyls): Also known as Aroclors. Regulated PCBs can only go to Kent or CENJ.
 - a. TSCA Regulated: If >50 ppm, it is TSCA regulated and can only go to a TSCA PCB permitted facility, i.e., Kent or CENJ unless exempt like certain small PCB ballasts. PCB results < 50ppm can also be TSCA regulated depending on the source and if the source was >50 ppm.
- 2. Cyanides, Total: If the stream contains Cyanides, list the amount in ppm, based on Total Analysis or other method of knowledge. >100ppm is an indicator of a D003 Reactive Cyanide. Cyanides usually must ship on a dedicated truck that is not shipping DOT incompatibles, such as Acids.
- **3.** Sulfides, Total: If the stream contains Sulfides, list the amount, in ppm, based on Total Analysis or other method of knowledge. >300ppm is a preliminary indicator of a D003 Reactive Sulfide (inorganic sulfides only).
- 4. VOCs: Stands for Volatile Organic Carbon. The ppm value corresponds with all the volatile organic Chemical Constituents, i.e. solvent liquids, but also be obtained from an analytical test by the same name. If a waste contains >500 ppm VOC, it is subject to Subpart CC regulations under EPA.
- 5. Subject to Subpart CC: If checked, the waste stream is subject to regulations as outlined in 40 CFR Part 264, Subpart CC related to air emissions standards at our facilities. If the waste stream is a D001 due to a flashpoint, always assume the waste is subject to Subpart CC. Any solvents or Volatile Organic Compounds usually fall subject to Subpart CC unless in very trace amounts.
- 6. TOC (%): Stands for Total Organic Carbon. There are set values to enter that should correspond with all the organic Chemical Constituents, but also obtained from an analytical test by the same name. Organic compounds contain a Carbon-Hydrogen bond (CH). To identify this, you will need to see the chemical formula. Many websites, even SDS' of a single compound, have the chemical formula, i.e. CH3OH (methanol). These websites may be able to help.
 - a. https://pubchem.ncbi.nlm.nih.gov/
 - b. https://www.chemicalbook.com/
 - c. Some families and compounds that have endings that fall under organics are:

Alcohols	Aldehydes	ether	Alkyis (methyl, ethyl, pentyl, -yl)
Alkenes	Alkynes	ketones	amines
Ester	amides	phenois	benzene
	Alkanes		

- 7. Ammonia: if any chemical constituents have ammonia, amine, and ammonium in the chemical name. There is an analytical test by the same name. If "Yes", check the pH because these compounds tend to be basic (pH>10) and may require D002 if pH>12.5 and liquid.
- 8. Asbestos, Friable: Asbestos Containing Material (ACM) must be determined to be friable or non-friable and the value entered. ACM is considered friable if it contains >1% asbestos, when dry, can be crumbled, pulverized, or reduced to powder by pressure with your hands (I.e., Pipe wrap or fluff insulation), otherwise it is considered non-friable (I.e., Mastic or Tiles).
- 9. Asbestos, Non-Friable: Asbestos Containing Material (ACM) must be determined to be friable or non-friable and the value entered. ACM is considered friable if it contains >1% asbestos, when dry, can be crumbled, pulverized, or reduced to powder by pressure with your hands (I.e., Pipe wrap or fluff insulation), otherwise is it considered non-friable (I.e., Mastic or Tiles).

- 10. Dioxins: This covers both dioxins: Actual dioxins (compounds that end with "dioxin", i.e., TCDD (Tetrachlorodibenzo-p-di-oxin) and dioxin-dioxin forming compounds, i.e., pentachlorophenol (D037), silvex (D017), 2,4,5-trichlophenol (D041), and tri-/tetra-/pentachlorophenol base compounds. If "Yes", F027 RCRA code would apply if a dioxin former. Limited to only five (5) Clean Earth TSDF's for acceptance.
- 11. PFAS/PFOA: If checked, the waste stream contains Perfluoroalkyl substances including Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS). They do not easily degrade. These materials are commonly found in fire-fighting foam (AFFF), anti-sticking compounds for cookware, as well as fabric and carpet stain resistors. They are restricted from most incinerators and only certain landfills will take them.
- **12. Phenolics:** Corresponds with organic compounds that contain "phenol" in the name of the compound in the Chemical Constituents. There are a couple listed compounds that contain phenol (i.e., 2,4- dinitrophenol(P048),4-nitrophenol(U170)) in its name and would carry the code if the product was unused and the sole active ingredient.
- **13. Herbicide/Pesticide:** If checked, it indicates that the waste stream is or contains a pesticide or herbicide. Some of these are U-List or D-List.
- **14. APHIS Waste:** If checked, the waste stream is regulated by the "Animal and Plant Health Inspection Service". Most Clean Earth facilities are not authorized to take waste regulated by APHIS.
- **15. CERCLA:** Check box if material is coming from a CERCLA/Superfund site. Only a CERCLA permitted facility can accept this material. Certain locations, i.e., Tacoma, and some 10-days would not be able to accept. The final disposal site must be a CERCLA permitted facility as well. A generator's approved facility list or disposal method may limit further disposal options and may need to be discussed with the generator if there are no alternatives.
- 16. Dust Hazard: This box should be checked if generator knowledge or the SDS indicates that the waste stream is a fine powder or dust for which respiratory care should be considered for workers handling these types of materials. These materials will not usually get bulked at a facility due to the respiratory hazards that may persist through dumping and mixing operations.
- 17. Ignitable Solid: If "Yes", RCRA Code D001 would apply along with a DOT Class 4 (4.1, 4.2, 4.3) PSN and most likely a physical state of solid (exceptions are desensitized explosives). Understand that not all 4.1 and 4.3 are D001, but all 4.2's carry D001.
- 18. Organic Peroxide: If checked, RCRA Code D001 would apply if a DOT Class 5.2 PSN is applied. Organic Peroxides are highly reactive and thermally unstable substances which undergo self-accelerating decomposition. They have oxidizing properties, and some are also toxic. When dealing with an organic peroxide material, extreme care needs to be given to the Self-accelerating decomposition temperature (SADT). There can be serious consequences if an Organic Peroxide is allowed to approach its SADT. Even if cooled, the material can undergo chemical changes that could cause it to detonate. Examples of common Organic Peroxides:
 - i. Benzoyl Peroxide
 - ii. Dicumyl Peroxide
 - iii. Peroxyacids
- **19. Oxidizer:** If checked, RCRA Code D001 would apply if a DOT Class 5.1 PSN is applied.
- **20. Radioactive:** If "Yes", no Clean Earth facility can accept it. The material must go direct to a 3rd party outlet. Naturally Occurring Radioactive Material ("NORM") is considered radioactive material. Any activity above background would prompt the facility to reject the waste material. Material pulled from a mineral ore, i.e., metal ore/powder, or petroleum exploration, i.e., Crude Oil tank bottoms (K169 and K170) or coal waste products, could potentially have some radioactivity, Potassi-um (K-40) is the most abundant NORM on Earth. If you come across pure product that is greater than 50% of a potassi-um compound, i.e., Potassium hydroxide, Potassium iodide, and Potassium carbonate, suggest sweeping the drum for radioactivity with a Geiger meter prior to scheduling a shipment. There are some manufactured household products that

are radioactive, i.e., smoke detectors (americium) and exit signs (tritium). For SDS', it is sometimes noted in section. If a DOT Class 7 PSN is used, then CHECK THIS BOX.

- **21. RCRA Debris:** Check box if the following criteria is met based on EPA definition of debris in 40 CFR 268.2(g). Any solid material that:
 - a. Has a particle size exceeding 60 mm;
 - b. Comprises visually the largest portion of the waste stream;
 - c. Is intended for disposal;
 - **d.** AND is either:
 - i. A manufactured object (scrap metal, concrete, glass, lumber, etc);
 - ii. Plant or animal matter (tree stumps, animal carcasses); or
 - iii. Natural geological material (boulders, rocks)
 - iv. "Debris" under RCRA definition does not include:
 - e. Debris" under RCRA definition does not include:
 - i. Materials with a particle size 60 mm (2.4 inches) or less; or
 - ii. Materials with specific treatment standards listed in 40 CFR 268, Subpart D (lead-acid batteries, cadmium batteries, radioactive lead solids); or
 - iii. Process residuals such as smelter slag; or
 - iv. Residues from the treatment of waste, wastewater, sludges, or air emission residues; or
 - v. Intact containers of hazardous waste that are not ruptured and retain at least 75% of their original volume.
- 22. Infectious: This is for material that is considered infectious and/or ships as DOT Division 6.2. If checked, it is unacceptable into any CE Facility and cannot even be transported by CE if Class 6.2. If a waste stream is a combination of Infectious and RCRA, it is called "Dual Waste".
- **23. Medical (sharps/needles):** This is for material considered potentially biohazardous or treated/disinfected non- infectious material. This also includes any material with a sharp. If checked, a non-infectious certificate must be completed.
- 24. Subpart P: This is checked if the waste stream consists of RCRA pharmaceutical products under the EPA definition. To utilize Subpart P, certain conditions must be met:
 - a. The waste stream must contain compatible RCRA Pharmaceuticals (can be mixed with Non-RCRA)
 - b. Generator State must have adopted Subpart P
 - c. VSQG generators must Opt-in and must get an EPA ID number
 - d. Must always ship on a Uniform Hazardous Waste manifest
 - e. Still subject to LDR
- **25. Cyanide Reactive:** If checked, RCRA Code **D003** would apply (based on reactive cyanide >100 ppm), unless using a RCRA exemption. The Cyanide should be identified in the Chemical Composition with a designated value. This material cannot ship on a truck with acids unless under a special permit or exception. May require a dedicated truck and should keep in mind for quoting. Dependi ng on the type of cyanide and the concentration, it could also be P- or U-listed (unused). Organic cyanides are typically flammable or mildly toxic.
- **26. Sulfide Reactive:** If checked RCRA Code **D003** would apply, unless using a RCRA exemption. The sulfide should be identified in the Chemical Composition with a designated value. Depending on the type of sulfide and the concentration, it could carry RCRA Code D003 (inorganic only) for reactive sulfides (>300 ppm). Organic sulfides are typically flammable or mildly toxic. Allows for alphanumeric characters and decimal points and "<".
- 27. Water Reactive: If checked, RCRA Code **D003** would apply, unless you use a RCRA exemption. DOT Division 4.3 will always get D003 and "Yes" for Water Reactive. Materials that are water-reactive include those that will react "violently" when exposed to water, or emit a toxic gas.

- 28. Reactive (Other)/Temp Sens: If checked, this is an indicator that the material may self-react if stored under un-favorable conditions. Types of materials would include Organic Peroxides with a low SADT (indicated on the SDS). Materials that are temperature sensitive are usually not able to be safely transported during summer/fall months in certain areas of the country. Disposal Instructions and Special Handling Notes should be utilized to communicate the SADT (Self-Accelerating Decomposition Temperature).
- **29. Metals:** If checked, the material is a RCRA Code **D003**. Reactive metals are a group of elements that can form a reaction with acids, water, mineral acids and powerful oxidizers. Although we find many metals as part of other compounds where they are not considered highly reactive, for the purpose of this identification we are looking at pure metals or metals that make up an uncharacteristically significant percentage of the waste material.

Metals		Reactivity
Potassium Sodium Lithium	Barium Strontium Calcium	Reacts with Water
Magnesium Aluminium Manganese Zinc Chromium	Iron Cadmium Cobalt Nickel Lead	Reacts with Acids
Hydrogen		Included for Compari
Antimony Bismuth Copper Mercurty	Silver Gold Platinum	Highly Unreactive

- **30. Explosive:** If material could ship as DOT Class/Division 1 under certain conditions, then "Yes" and RCRA Code D001 and D003 may apply if still managed as a Class 1 material.
- **31. Polymerizes:** For materials considered polymerizable, i.e., monomers, acylates, isocyanates, these materials will require a polymerizable evaluation at time of profile submission. In most cases, the expiration date will be a month and will require a new polymerizable evaluation form to post the profile again. In some instances, an evaluation form may be required for every shipment.
- **32. Pyrophoric:** If checked, RCRA Code D003 would apply, unless you use a RCRA exemption. Pyrophoric chemicals can ignite spontaneously upon contact with Oxygen/Air. Pyrophoric alloys can produce sparks when struck or scraped. They can also have water-reactive properties resulting in flammable gas production. Some examples of pyrophoric materials include:
 - a. Metal Hydrides
 - **b.** Finely divided metal powders
 - c. Non-metal hydrides
 - d. Alkyl Compounds
 - e. White phosphorus
 - f. Alloys of reactive materials
- **33. Shock Sensitive:** If checked, the material is RCRA Code D003 and most likely considered explosive. Typically, material that is not accepted at any CE Facility.

SECTION F: USEPA/STATE/GENERATOR STATE WASTE IDENTIFICATION

- 1. Federal Universal Waste: If checked, it meets the definition of a Federal Universal waste that has been adopted by all 50 states. RCRA codes would not apply.
- 2. **EPA/Exemption ref:** If the RCRA Exempt box is checked, please use this area to identify the exact exemption in 40 CFR. Also use this box if a State Exemption is being utilized.
- 3. EPA Waste Codes: Complete the EPA Code information of the profile. Use any information supplied by the generator for the RCRA code determination with your resources, such as the RCRA definitions/lists and this guidance document. RCRA codes can come from the generator (verify if justified), analysis, as well as answers from the process (F and K codes), and other additional hazards information. Do not enter EPA Codes for EPA Universal Waste Streams.
- 4. State Code(s): Complete the State Code information of the profile. List all applicable codes for both the Generator and TSDF state (even if CESQG/VSQG).
 - a. If the generator is a Texas generator with a registered Waste Stream ID, then that Waste Stream ID should be listed as a State Code.
- 5. State Regulated Waste: Check box if this is a regulated waste in the Generator or TSDF state
- 6. Generator Statue Universal Waste: This is checked for a generator state universal waste or a Federal Universal Waste that has not been fully adopted, i.e., Aerosols. Not for batteries, bulbs, and intact mercury devices. RCRA codes apply if the destination state has not adopted the regulation.
- 7. WA State DW/EHW: If generator is in WA or the TSDF is in WA, please indicate the correct WA Designation for the waste.
- Waste Subject to Land Disposal Restrictions (LDR): check box if the waste is subject to RCRA LDR. Any waste carrying a RCRA Waste Code on a manifest will be subject to LDR, including VSQG/CESQG carrying manifested codes and Subpart P.
- 9. Wastewater/Non-Wastewater: Select if the Waste Stream is a Wastewater or Non-Wastewater (A wastewater is defined as a less than 1% Total Organic Carbon (TOC) and less than 1% Total Suspended Solids (TSS)
- 10. LDR Material meets Federal Treatment Standards? Does the waste material meet (or was treated to meet) the LDR Treatment Standards as indicated in 40 CFR Part 268.40 (Haz Waste) and/or 40 CFR Part 268.48 (Universal Treatment Standards)?
- 11. LDR UHCs: Enter the Underlying Hazardous Constituents (UHCs) for the LDR.

SECTION G: REGULATED CONSTITUENTS

GENERAL INSTRUCTIONS for COMPLETING TCLP CERTIFICATION SECTION TABLES:

- **Source:** Select the correct source(s) that the information supplied in the Metals, Volatiles, Semi-Volatiles and Pesticide/Herbicide sections are based on. The user can select one or more than one as appropriate.
- User MUST select one of the radio button categories for each compound in the tables. Only one may be selected.
- User can mass-select "Not Present at All" for any given section and then can adjust any individual compound to another category (for ease of use)
- If putting any value in the "Range" box, user should select the proper Unit of Measure (based on the test type)
- The results in each table should account for any corresponding RCRA Toxic Characteristic codes carried in the EPA Waste Code Section. (ex. If D008 is being carried as a RCRA Code, then the D008 Lead in the Metals Section should be marked "Above TCLP Limit", and, if there is analysis, then the analytical results should be notated in the "Range" with the proper test method (TCLP or TOTAL)
- 1. Edit Metals: Fill in the Metals table with the proper values
- 2. Edit Volatile Compounds: Fill in the Volatiles table with the proper values
- 3. Edit Semi-Volatile Compounds: Fill in the Semi-Volatiles table with the proper values
- 4. Edit Pesticides/Herbicides: Fill out the Pesticide/Herbicide table with the proper values

SECTION H: SHIPPING INFORMATION

- 1. Limited Quantity: Check this box if the waste stream is a "Loose Pack" and where the material inner containers meet the limited quantity container size for the respective proper shipping name and packing group, and the final package must not weigh more than 66 lbs. When this box is checked, "LTD QTY" is added to the DOT Name Addition field and prints on the shipping documents and label. Also, this statement must be added to the Special Handling section, "Inner packages do not exceed limited quantity size for the respective proper shipping name and packing group and the final package does not exceed 66 lbs.", if not already populated.
- 2. Marine Pollutant: The Marine Pollutant box should be checked if any of the constituents in the waste are on the Marine Pollutant list found in Appendix B of 49CFR 172.101 (bottom list)
 - a. The box should only be checked if the generator is shipping on a vessel over water (ie. AK, HI, PR). The waste stream is subject to the Marine Pollutant Regulations if:
 - i. It is a bulk (>199 gallons) package with Marine Pollutant concentration >10% or Severe Marine Pollutant concentration >1% OR
 - ii. It is non-bulk Marine Pollutant shipped by vessel (boat) in packages larger than 5 liters (liquid) or 5 kg (solid) OR
 - iii. It is a non-bulk Severe Marine Pollutant, shipped by vessel (boat) in packages larger than 0.5 liters (liquid) or 0.5 kg (solid)
- 3. RQ: Check this box if the waste stream, based on Content and known package sizes will meet the Reportable Quantity threshold and needs to have "RQ" printed on the manifest as part of the DOT Shipping Description.
- RQ Description: If you checked the RQ box, enter the RQ constituent or RCRA code in this field. 49CFR 172.101 Table 1 to Appendix A (RQ Table) (middle of file). This defaults to adding to the PSN if not entered at manifest creation.

- 5. Inhalation Hazard? Check this box if the material is an Inhalation Hazard per DOT
 - **a.** Under "Special Provision" column: if a numeral 1, 2,3,4, or 5 is the first entry, it is a poison inhalation hazard.
- 6. Inhalation Hazard Zone: If the material is known to be an Inhalation Hazard, indicate the Zone

7. Additional DOT Information:

- a. Special Permits / CA Letter: Enter information such as: DOT special permit number (i.e. DOT SP-13912), Poison Inhalation Hazard Zone (Follow "DOT Code" section instructions to find it)(i.e. Poison Inhalation Hazard Zone B), DOT Competent Authority Letter # (i.e. CA2002120014) etc. Lighters always ship under a Special Permit or require Test data.
- 8. **US DOT DESCRIPTION:** When figuring out which shipping name to assign, go through a progression.
 - a. SDS supplied Proper Shipping Name (PSN)/basic description (BD) should apply when it is only that exact product.
 - **b.** If a product does not have an SDS but only contains the one chemical compound, then look for the PSN/BD in the table above.
 - c. If a PSN/BD cannot be found, then you need to look at the characteristics for a generic shipping description. Base it on the characteristics and for mixtures, use the DOT precedence table (49CFR 173.2a) or using the lower numbered hazard class as the primary and the other characteristic for the secondary class
 - i. Ex: A liquid that exhibits flammability (D001) and corrosivity (D002) would have a generic shipping name like:
 1. UN2924 Waste Flammable Liquid, Corrosive, N.O.S., 3 (8) PG II
 - d. Universal wastes do not ship with RCRA codes and would not have "Waste" in the Proper Shipping Name (PSN).
 - e. RCRA empty containers that are going for <u>landfill</u>, that have not been rinsed thoroughly, and formerly contained a DOT hazardous material must ship with the original DOT PSN/BD and the words "Residue: Last Contained" added. RCRA empty containers going to recycle, reuse, or reconditioning do not require this DOT addition.
- 9. Method of Shipment: Select the appropriate shipment method(s). Clean Earth is still separating Bulk and Non-Bulk Process Codes. Only one process code can be applied to a profile. Separate profiles are necessary for materials being shipped in both Bulk and Non-Bulk
- 10. Avg Shipment Qty / Frequency: Enter the Shipment Frequency and Quantity information

GENERATOR CERTIFICATION

General Guidance: Although it is recommended that this form be used as a "worksheet" and not an actual signed profile, the content is consistent with our permits (except CENJ) and can be used up front as a signed profile. It must be noted that we have a workflow in place in CORE to send out an Approval Letter package to the Generator after the profile has been approved (as per EPA regulations). This package will by default include a "system-generated" copy of the profile for signature that includes any changes that may have incurred during the profile approval process (which happen quite often). The copy of the profile that is signed as part of the approval letter package will be considered the "final" signed profile.

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933 First Avenue, Suite 200, King Of Prussia, PA 19406 USA t 215.734.1400 w cleanearthinc.com

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