7001.0630 PART B INFORMATION AND SPECIAL PROCEDURAL REQUIREMENTS FOR THERMAL TREATMENT FACILITIES.

Except as provided in part 7045.0542, subpart 1, if the applicant proposes to treat or dispose of hazardous waste by using thermal treatment, the applicant shall fulfill the requirements of item A, B, or C in addition to the information requirements of part 7001.0560, and the commissioner shall fulfill the requirements of item D:

A. If the applicant is seeking the exemption provided by part 7045.0542, subpart 1, item B or C, relating to ignitable, corrosive, or reactive wastes, the applicant shall submit documentation showing that the waste includes none or insignificant concentrations of the hazardous constituents listed in part 7045.0141, and one of the following:

(1) that the waste is listed as a hazardous waste in part 7045.0135 only because it is ignitable according to Hazard Code I, because it is corrosive according to Hazard Code C, or because it is both ignitable and corrosive;

(2) that the waste is listed as a hazardous waste in part 7045.0135 only because it is reactive for characteristics other than those listed in part 7045.0131, subpart 5, items D and E, and will not be treated when other hazardous wastes are present in the combustion zone;

(3) that the waste has been tested for the characteristics of hazardous waste set forth in part 7045.0131 and that its only hazardous characteristic is ignitability, corrosivity, or both; or

(4) that the waste has been tested for the characteristics of hazardous waste set forth in part 7045.0131 and that its only hazardous characteristic is reactivity as described by part 7045.0131, subpart 5, item A, B, C, F, G, or H, and will not be treated when other hazardous wastes are present in the combustion zone.

B. The applicant shall submit results of a trial burn conducted in accordance with part 7001.0700, including all the determinations required by part 7001.0700, subpart 6.

C. The applicant shall perform an analysis of each waste or mixture of waste to be treated by using the analytical techniques set forth in the Environmental Protection Agency document SW-846, as incorporated in part 7045.0065, or by using techniques found by the commissioner to be equivalent to them. The applicant shall submit all of the following information:

(1) The results of each waste analysis performed, including:

(a) the heat value of the waste in the form and composition in which it will be burned;

(b) a description of the form and composition of the waste and, if applicable, viscosity of the waste;

(c) any hazardous organic constituents listed in part 7045.0141 that are reasonably expected to be found in the waste;

(d) all waste constituents listed in part 7045.0141 for which no analysis was done and an explanation of why this analysis was not done;

(e) an approximate quantification of the hazardous constituents identified in the waste, within the precision specified by Environmental Protection Agency document SW-846, as incorporated in part 7045.0065;

(f) a quantification of those hazardous constituents in the waste that may be designated as principal organic hazardous constituents based on data submitted from other trial or operational burns which demonstrated compliance with the performance standards set forth in part 7045.0542, subpart 4; and

(g) waste analysis data sufficient to allow the commissioner to specify as permit principal organic hazardous constituents those constituents for which destruction and removal efficiencies will be required.

(2) A detailed engineering description of the thermal treatment unit, including:

(a) the manufacturer's name and model number;

(b) the type of thermal treatment unit;

(c) the linear dimensions of the thermal treatment unit, including the cross sectional area of the combustion chamber;

(d) a description of the auxiliary fuel system, including type and feed rate;

(e) the capacity of the prime mover;

(f) a description of any automatic waste feed cutoff system;

(g) nozzle and burner design;

(h) construction materials; and

(i) location and description of temperature, pressure, and flow indicating devices and control devices.

(3) A detailed engineering description of air pollution control equipment and stack gas monitoring and pollution control monitoring systems, including:

(a) manufacturer's name and model numbers;

(b) physical dimensions; and

(c) if applicable, specifications as to air flow, pressure drop, discharge, voltage, and water flow.

(4) A description and comparison of the waste to be burned with waste for which data has been obtained from previous operational or trial burns, including the data listed in subitem (1), and a comparison of the principal organic hazardous constituents found in the wastes being compared.

(5) A description and comparison of the design and operating conditions of the proposed thermal treatment unit with the design and operating conditions of the thermal treatment unit used in the previous operational or trial burn. For the previous operational or trial burn, the applicant shall submit a description of the results of such previously conducted operational or trial burn, including:

(a) sampling and analysis techniques used to calculate compliance with the performance standards set forth in part 7045.0542, subpart 4;

(b) monitoring methods and results for temperatures, waste feed rates, carbon monoxide, and an appropriate indicator of combustion gas velocity, including a statement concerning the precision and accuracy of this measurement;

(c) identification of any hazardous combustion by-products detected; and

(d) the certification and results required by part 7001.0700, subpart 7.

(6) A description of the operating procedures proposed by the applicant, in sufficient detail to allow the commissioner to determine whether the proposed thermal treatment unit will meet the performance and operating standards of part 7045.0542, subparts 4 and 6, including:

(a) expected carbon monoxide, oxygen, and carbon dioxide levels in the stack exhaust gas;

(b) waste feed rate;

(c) combustion zone temperature;

(d) indication of combustion gas velocity;

(e) stack gas volumes, flow rate, and temperature;

(f) computed residence time for waste in the combustion zone;

(g) expected hydrochloric acid removal efficiency;

(h) expected fugitive emissions and control procedures; and

(i) proposed waste feed cutoff limits based on the identified significant operating parameters.

(7) Estimated emissions, in tons per year, of particulates and sulfur dioxide.

(8) Any other additional information that the commissioner determines is relevant to a decision to permit issuance.

D. If the applicant has proceeded under item A or B, the commissioner shall review the Part B application for completeness in accordance with part 7001.0090.

If the applicant has proceeded under item C, the commissioner shall review the Part B application for completeness. The commissioner shall find the application complete if the commissioner finds:

(1) that the applicant has submitted all the information required by item C;

(2) that the wastes compared under item C are substantially similar;

(3) that the thermal treatment units compared under item C are substantially similar; and

(4) that the data from other trial burns is adequate to enable the commissioner to specify under part 7045.0542, subpart 6, the operating conditions that will ensure that the performance standards in part 7045.0542, subpart 4, will be met by the proposed thermal treatment unit.

Statutory Authority: *MS s 116.07*

History: *8 SR 2276; L 1987 c 186 s 15; 33 SR 2042*

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