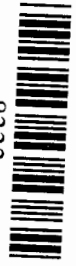
Los Alamos National Lab
NM0890010515
Incinerator Completeness Check
June 14, 1985

EPA REG	NMEID REG	COMMENT
		HAZARDOUS WASTE INCINERATOR PERMIT-TRIAL BURN PLAN
270.62 (b)(2)(i)	302.E.2.b.(2)(a)	(1) Los Alamos needs to state the approximate quantification of hazardous constituents in the waste. (If none are present besides CCl_4, it should be stated.)
		(2) Los Alamos needs to provide the viscosity of liquids to be used in the trial burn
264.344 (c)(2)	206.D.8.e.(3)(b)	(3) Los Alamos should reference the appropriate cites in the trial burn and not state "not applicable".
270.62 (b)(2)(ii)	302.E.2.b.(2)(b)	(4) Los Alamos needs to provide the internal dimensions of the incinerator (shown on a drawing). (The dimensions provided are not identical to the dimensions provided in the PCB submission.)
		(5) Los Alamos should discuss the use of auxilliary fuel, including the blending of fuel oil in the static mixer.
		(6) Los Alamos needs to provide a discussion of the gas monitoring, fuel oil blending, and the air pollution control monitoring devices.
		(7) The automatic waste feed cut off system needs to be fully described. The waste feed cut off points are not to be negotiated. They are based upon the trial burn and the trial burn results. The trial burn is to detail the cut off limits to be established. These limits are to be used during the trial burn. (Los Alamos is to list the limits.) Also, NMEID may establish any other operating condition necessary to ensure that the performance standards are being met in addition to the listed conditions. These may include oxygen limits and scrubber limits such as pressure drop and scrubbant pH, etc. The temperature limit is not a limit minus 50°F. It is the operators responsibility to maintain a temperature above the permit condition's minimum temperature limit. The CO limit is also a limit and not a two (2) tier limit. The operator may establish a two (2) tier alarm limit to ensure compliance with the permit condition CO limit. Los Alamos has not proposed their two (2) tier CO limit or any CO limit. (EPA will consider a two (2) tier CO limit of a maximum CO limit (50 ppm) and an hourly average of 10 ppm). There is no discussion of waste feed limitations. There will be a POHC limit because CCl_4 is not the most difficult compound to incinerate per the hierarchy. Most of this data can be found in the PCB trial burn. The PCB trial burn results should be submitted to show the incinerator's performance ability for PCB.



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		(8) Gas cleaning equipment needs to be described in greater detail including the listing of related performance and operating conditions. Los Alamos states that the venturi removes up to 99 percent by weight and the pressure drop is controlled in the 40 to 60 inches W.C. range. What is the mathematical relationship between pressure drop and removal efficiency?
270.62 (b)(2)(iii)	302.E.2.b.(2)(c)	(9) Los Alamos should do an analysis of the ash for CCl_4 to prove the statement on J-22 about "the unlikely possibility of CCl_4 being present in the ash".
270.62 (b)(2)(v)	302.E.2.b.(2)(e)	(10) Page J-41, Los Alamos quotes from the March 1983 Guidance Manual to suggest that there are no permit conditions for minimum or maximum heat value of solids. To ensure the performance standards are met, there will be permit conditions related to the heat input of the solid wastes. Also, there may be permit conditions placed on the secondary chamber even if no waste is fed into the chamber to ensure that the performance standards are met. (11) The gas velocity needs to be specified. (12) The waste feed ash content must be specified and agreed too prior to having a complete Part B application. The ash content is to be specified in the permit. (13) On page J-44, it is stated that only 3 Appendix VIII constituents at levels above 1000 ppm would not be allowed to be incinerated: $CFCl_3$,$CHBr_3$, and CF_2Cl_2. Los Alamos needs to provide waste analysis on all wastes for these these 3 compounds (documentation to show waste analysis was being performed has not been located in the Part B Waste Analysis Plan). Los Alamos also needs to revise the waste analysis plan to include the waste analysis necessary for the incinerator. The concentration limit for insignificant concentration of Appendix VIII waste for incineration is 100 ppm not 1000 ppm. (14) Los Alamos may not burn the residual wastes left from the trail burn without a permit for the incinerator since the incinerator does not have interim status.
270.62 (b)(2)(vi)	302.E.2.b.(2)(f)	(15) Los Alamos needs to provide more details on, scrubbant flow, scrubbant pH, and narrower range of pressure drop for the venturi.
270.62 (b)(2)(vii)	302.E.2.b.(2)(g)	(16) The shut down procedures are to be specified.

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270.62(c)	302.E.2.c	(17) Los Alamos can not continue to operate the incinerator after the trial burn without having been issued a full RCRA permit. The operating conditions must be specified in the permit (these conditions will not be 265 standards).
270.19(c)	302.A.4.b.(2)(e)(iii)	(18) Los Alamos should submit the PCB trial burn data to support their RCRA permit application.
264.14(b)(2)(i)	206.B.4.b.(2)	SECURITY (19) Los Alamos needs to provide the height and construction material of the fence at TA-50.
264.14(c)	206.B.4.c	(20) The warning signs' legend needs to be described. Also, building TA-50 should be posted with warning signs. (Building TA-50 is stated as fenced on page 4-6. Is the fence posted with the warning signs?) (21) Section 6.2. The warning signs on the entrances to the TA-50 waste incinerator should be revised to include the additional hazards.
		GENERAL INSPECTION (22) Section 6.3.2 and Table 6.2. The inspection schedule needs to include inspection of the fence around TA-50.
264.347	206.D.8.g	(23) Section 6.3.2 and Table 6.2. The inspection schedule for the TA-50 incinerator needs to be revised to show specifically what incinerator equipment will be inspected and when. For example, daily inspections for leaks, spills, fugative emissions, and signs of tampering and weekly testing of the emergency waste cutoff system and alarm systems, etc. In the incinerator section, Chapter 4, it is stated that the operator checks the systems and once each shift the shift supervisor will inspect. This is not detailed as to what is being inspected and when. This is also not reflected in the Inspection Plan and attached schedules. Are there schedules and checklists for these inspections?

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		PERSONNEL TRAINING
264.16 (d)(1) & (2)	206.B.6.d.(1) & (2)	(24) Los Alamos needs to describe the training records to show that the required the minimum information is being maintained for incinerator personnel.
		CLOSURE
264.112 (a)(2)	206.D.2.c.(1)(b)	(25) There is no detailed maximum waste inventory for the incinerator given in the Closure Plan.
264.112 (a)(4)	206.D.2.c.(1)(d)	(26) Los Alamos needs a full schedule for the final closure (procedures and the schedule).
264.113 (a) & (b)	206.D.2.d.(1) & (2)	(27) Los Alamos has not applied for an extension of the closure time (180 days). Therefore, the closure activities must be scheduled and completed within 180 days.
264.114	206.D.2.e	(28) The Closure Plan is required to contain details of the decontamination procedures. Los Alamos needs to submit criteria for determining the existance and levels of contamination and the method used to demonstrate that decontamination is complete (a visual inspection is not adequate). Also, Los Alamos needs to provide decontamination procedures for the equipement used in the cleanup.
264.351	206.D.8.h	(29) Los Alamos needs to discuss the closure of the incinerator tanks in Figure 6, page J-21. Also, Los Alamos needs to define the term, "appropriate manner for disposal". All wastes generated in the clean up are RCRA wastes (besides being DOE wastes) and must be handled as such. The 2 (two) incinerator chambers must be sent to a designated HAZARDOUS WASTE treatment and disposal facility or be decontaminated.