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Change Number M-20-92-7	FEDERAL FACILITY AGREEMENT AND CONSENT ORDER CHANGE CONTROL FORM <small>Do not use blue ink. Type, or print using black ink.</small>	Date May 18, 1993
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Class of Change

I - Signatories (Section 13.0) XII - Project Manager III - Unit Manager

Change Title

Delay in submittal for TPA Milestone M-20-42 to December 31, 1994

Description/Justification of Change

See Attached.

Impact of Change

There will be no impact due to the change. Laboratory operations can continue under interim status (Part-A Permit).

However, TPA Milestone M-20-42 will be delayed twelve months until December 31, 1994.

This delay does not have any impact on the overall Hanford cleanup schedule.

Affected Documents

The submittal for TPA Milestone M-20-42 Thermal Treatment will have a twelve month delay.

Approvals	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved
<i>[Signature]</i>	Date 8/3/93
DOE <i>[Signature]</i>	Date 8/3/93
EPA <i>[Signature]</i>	Date 8/3/93
Ecology	Date



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ATTACHMENT 1 - Consent Order Change Control Form #M-20-92-7

The requested delay of Milestone M-20-42 from 12/31/93 to 12/31/94 will allow time to develop and implement a revised permitting strategy for thermal treatment testing and for other technology development activities in support of Hanford cleanup that meet the needs of DOE, Ecology, EPA, PNL, and WHC.

While preparing the Thermal Treatment Testing Unit Part B Permit application and applications for Physical/Chemical (M-20-43) and Biological (M-20-44) Treatment, it has become apparent that a Part B permit may not be the preferred approach for most research, development, and demonstration (RD&D) activities envisioned under these applications. Part B permits were designed primarily for repetitive process operations, where the design of the process operation is well defined, and changes to process parameters are relatively infrequent. In addition, the administrative processes to modify Part B permits require considerable time and investment of staff resources. This is in contrast to typical RD&D activities where equipment design typically evolves over time and modifications are regularly being made to optimize process operations. Our efforts to assemble the technical information to prepare an acceptable Part B Permit have been constrained by the evolving nature of specific technologies to be included within the Thermal Treatment Testing Part B Permit application. These recurring changes in the base technologies make it difficult to completely define the exact mix of technologies and the particular version of a specific technology to be included with the permit application. Further, we have found that the long-term nature of the Part B permit preparation and review process makes difficult to match a specific and evolving research technology to a specific waste stream which may not yet be identified or fully characterized.

To address the unique permitting needs of research, development, and demonstration of experimental and innovative processes, EPA devised the treatability exemption and RD&D permit. Many of the activities originally envisioned for inclusion in the Thermal Treatment Testing Unit Part B Permit application fall under the category of experimental and innovative processes. These include such processes as in-situ heating, in-situ vitrification, and waste vitrification and involve bench, engineering, and pilot-scale studies. These experimental systems have the capability to treat a variety of hazardous, and/or mixed-wastes and in quantities exceeding the small quantity treatability limits. Many of the treatment technology development activities underway and planned for the future may be better served by the RD&D permit rather than a Part B permit. Further, it is inefficient to use PNL, DOE, and Regulator resources to develop and review a Part B application, when the results of the permitting strategy study described below, may conclude that the Part B is not the appropriate vehicle for many of the anticipated thermal treatment activities.

On January 22, 1993, staff from the Department of Ecology, EPA Region X, DOE, PNL and WHC staff met to discuss technology permitting issues. This meeting was arranged at the request of the Department of Ecology, who expressed a desire to evaluate the current permitting process for new technology. During this meeting, several alternatives were discussed for permitting technology

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development and demonstration activities. The RD&D permit was identified as a viable option for development and demonstration activities envisioned at Hanford. Further, there seemed to be a consensus that a variety of other permitting approaches (e.g., CERCLA on-site waiver, treatment by generator) should be explored for Hanford Facility activities. Also there was a need expressed for an integrated permitting approach that will support the timely development and demonstration of new technology throughout the Hanford Site. Subsequent meetings with Ecology/EPA staff have further substantiated the need for a comprehensive and consolidated approach to defining Hanford permitting requirements.

To address these issues, a review has been initiated of the Hanford technology permitting activities in general and specifically, the current requirement to submit three Part-8 Permit applications for technology development and demonstration activities. These applications include: the Thermal Treatment Testing (TPA# M-20-42 [Due 12/31/93]), the Physical/Chemical Treatment Testing (TPA# M-20-43 [Due 12/31/94]), and the Biological Treatment Testing (TPA# M-20-44 [Due 12/31/95]). It is expected that a permitting strategy will be developed that 1) identifies "targeted" technologies, activities, and facilities; 2) identifies permit options; 3) recommends a permit and compliance option for each activity/facility based on the nature, duration, location, and the type and quantity of activities and/or wastes; and 4) defines a schedule for developing appropriate permits, including any recommended changes in the above TPA Milestones. PNL and WHC, at the request of DOE, have initiated this planning effort. Preliminary results from this evaluation are expected to be available by September 30, 1993. To adequately address the needs of all interests, appropriate interaction among DOE, Ecology, EPA, PNL, and WHC will be required over the course of the evaluation.

In summary, the requested 12 month delay in Milestone # M-20-42 from December 31, 1993 to December 31, 1994 will provide adequate time to define the scope and assemble the necessary technical information to support future permitting requirements for thermal treatment testing. In addition, the extension will allow a re-evaluation of the technology permitting needs of Hanford and development of an integrated permitting plan consistent with the requirements of all parties. This comprehensive evaluation of permitting requirements will also avoid a possible series of AD HOC permitting determinations on individual technologies and provide a system within which RD&D activities vital to the cleanup of Hanford may continue while ensuring protection of human health and the environment.

PNL technical staff are continuing to work on technical portions of the Thermal Treatment Testing Facility Part-8 Permit Application. However, early resolution of this change request is sought so that staff can be redirected to conserve limited permitting resources, pending completion of the permit planning effort. Research activities under the Thermal Treatment Testing Unit (M-20-42) have interim status. To date, however, only one test at the In Situ Vitrification Site has fallen within the criteria of the Interim Status Part A Permit for Thermal Treatment Test Facilities.

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