

October 27, 2005

Mr. Mike McCann  
U.S. Nuclear Regulatory Commission  
Region III  
2443 Warrenville Road  
Suite 210  
Lisle, IL 60532-4352

**Battelle**  
*The Business of Innovation*

505 King Avenue  
Columbus, Ohio 43201-2693  
(614) 424-6424 Fax (614) 424-5263

Dear Mr. McCann:

**Subject: License Amendment Application (NRC License No. SNM-7)**

Battelle is requesting an amendment to its NRC Decommissioning License, SNM-7. The purpose of the amendment is two fold. First, Battelle is requesting a change to the decommissioning schedule as referenced in our Decommissioning Plan (DP) revision 5. Second, due to the change to the decommissioning schedule, Battelle is requesting an extension to our current decommissioning license expiration date. The proposed changes and justification are briefly discussed in the following text. Enclosed, in support of the application, are revised DP sections 2.1.5, 7.0, 7.1, 7.2, and a copy of the new proposed decommissioning schedule represented by Figure 2.6.

The changes to the DP occur with Sections 2.1.5 and the associated project schedule (Figure 2.6) as well as sections 7.0, 7.1, 7.2:

- Buildings KA-1, KA-2, and KA-3 have been decommissioned and released by the NRC. Buildings KA-4, KA-5, KA-6, KA-7, and KA-A and their associated areas have for the most part been through the process of final status surveys and IVC surveys and turned over to Battelle's radioactive material license with the Ohio Department of Health for management.
- At the time of the writing of this request, Building JN-2 and JN-3 activities has been completed per the requirements of the DP. Building JN-1 has been deconstructed and packaged as radioactive waste but the sub-grade removal of associated piping and structures continues at the time of the writing of this request. *JN-1 work has been slowed at times due to issues with both obtaining adequate radioactive waste containers to keep up with the progress of the work as well as the volume of radioactive waste encountered versus initial projection.* The external areas at the West Jefferson North Site include the completion of all final status surveys and associated documentation. This work lags behind the completion of JN-1 as a natural progression of activities.
- A new task added to the Figure 2.6 is TRU Waste. This task includes the shipping from site of all of the staged TRU waste to an approved TRU waste receiver in addition to the demolition of the TRU Waste Staging Pad Area following shipment activities. The TRU Waste activity has been hampered in the past by identifying an approved receiver for all of the staged TRU waste. However, as of October 13, 2005 we now have an approved receiver in DOE's Savannah River Site (SRS) and shipments have been initiated to SRS.

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In consideration of the change to the decommissioning schedule, Battelle requests that the license expiration date be extended to allow for the completion of decommissioning activities through March of 2006. Additionally, Battelle requests that the license be maintained active through the license termination period activities which starts with the Battelle submittal of the NRC Form 314. The license termination activities would follow immediately after completion of the West Jefferson North Site external area activities. Please call me at (614)424-4098 to answer any questions you may have or to provide additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "Joe Jacobsen".

Joe Jacobsen  
BCLDP Radiation Safety Officer

Attachments: As stated

- Prerequisites including qualification and certification requirements
- Sequence of operations
- Acceptance criteria
- Record keeping requirements.

The procedures needed have been identified for the project and developed by the designated project staff. Documents are prepared in accordance with the quality procedures noted above. Documents are prepared and revised by task members, task leaders, technical personnel, and project management. All documents will be approved by Document Control and project management prior to release for use. The current index of project procedures/plans is included as Attachment 3.

#### 2.1.4.1 Document Control

All procedures are controlled as described in QD-AP-6.1<sup>16</sup>, "Document Control." The review, comment, revision, and approval process for the procedures is documented. Document Control assigns the approvals needed for controlled documents. These documents require at least two approvals in addition to that of the originator before implementation. They also require approval by Quality Engineering and Independent Oversight .

Project Records retains the original copy of the approval page, and is responsible for issuing copies of new and/or revised procedures to individuals designated by Project Management to receive them. Project Records maintains logs of document distribution. Project Records also publishes a monthly log of all active project procedures indicating their revision status and date of issue. This is distributed to predetermined, responsible personnel. All project personnel are required to have an approved procedure before work is started and to assure that they have the proper version of the document. All project personnel working with a Work Instruction (WI) are required to read and document by signature that they understand the WI being performed. For more critical procedures, they must demonstrate proficiency.

Methods for document revision and accomplishing activities under approved, temporary procedures are specified in QD-AP-5.1.<sup>14</sup> Advance copy procedures are issued for sixty days, but may be extended another thirty days. *After the thirty-day extension, the Advance Copy expires and must be incorporated into an existing or new procedure.* The Training and Records Coordinator is responsible for assuring that the advanced copy is terminated or incorporated into an existing or new procedure.

#### 2.1.5 Schedules

Decommissioning activities for the Battelle nuclear facilities began in June 1988 with the initiation of planning and assessment.

Figure 2.6 shows the baseline schedule for decommissioning each of the remaining areas at the West Jefferson North Site. Development of more detailed building-specific milestones is part of the D&D planning and Readiness Review process for the individual building. Buildings JS-1, JS-10, JS-12, KA-1, KA-2, KA-3, KA-9, and KA-3 have been decommissioned and released. Buildings KA-A, KA-4, KA-5, KA-6, and KA-7 have largely been through final status surveys as

well as IVC surveys and turned over to Battelle for management under the Battelle Ohio Department of Health radioactive materials license. As shown in the project schedule (Figure 2.6), the activities for each building will be parallel. Figure 2.6 indicates that the critical path for the decommissioning activities runs through completion of the building that will require the most time, Building JN-1. Specific activities and milestones for decommissioning this building, as well as the other areas, are being planned as part of the building/area-specific D&D/Readiness Review plans. Due to the nature of these areas at the West Jefferson North Site, and available funding, the D&D, including activities to prepare the formal license termination request has been scheduled through March of 2006.

The current status of each of the buildings at the West Jefferson North site and the status of past work at other buildings are described in Section 7.0 of this document.

## 2.2 Decommissioning Organization and Responsibilities

Battelle will conduct D&D activities either directly or through contractor(s). Battelle has the ultimate responsibility for complying with all the environmental, safety, and health requirements of the NRC license SNM-7.

### 2.2.1 Department of Energy – Ohio Field Office

The DOE-OFO has established an on-site office known as the Columbus Closure Project (CCP). The DOE Project Manager (on site) is responsible for DOE oversight and field management of the CCP. As the DOE Contracting Officer's Technical Representative, he has technical and programmatic authority for overall project implementation. The DOE Contracting Officer is responsible for contract administration.

### 2.2.2 Decommissioning Operations

Battelle, either directly or through contractor(s) as discussed in Section 1, will manage, integrate, perform, and subcontract the decommissioning operations, as necessary, to ensure that all activities are performed within the requirements for occupational, radiological, and industrial safety; environmental protection; site security; cost and schedule baselines; and the technical objectives of the project. Battelle will continue to directly oversee, audit and assess operations to ensure compliance with procedures, upper tier documents and commitments including the approved release criteria as explained in Section 1. Battelle will continue to be directly responsible for TRU waste management, as well as any other services that may be tasked by the DOE. After the completion of decontamination and decommissioning activities, a final status survey of all facilities and areas will be conducted to verify that decontamination is complete and that the facilities may be released without restriction. DOE will be notified and an IVC survey will be performed by ORISE under a contract with DOE-Oak Ridge to verify that decommissioned facilities are suitable for release without radiological restrictions. A certification package will then be submitted to the NRC for its review and final certification of facility and area release. The Battelle management structure and operational relationships for the period after the transition to include a new, major contractor is depicted in Figure 2.7 and is described in Section 7.2.4.

## 7. Current Status of Decommissioning Activities

This section describes the current status of the remaining BCLDP activities which are at the West Jefferson North Site and the status of past work at other buildings. It includes both building status on remaining activities and refers to changes to the radiation protection program found in Section 3.3. Note that it is Battelle's intent that this DP in general be applicable to State of Ohio decommissioning activities, and in specific, the current decommissioning methodologies and limits.

### 7.1 General Information

Decommissioning efforts have been implemented at the West Jefferson and King Avenue facilities since 1986, after approval by the DOE and NRC. This section provides a brief description of the radiological status of the decommissioning effort at the Battelle West Jefferson North Site. Battelle maintains a license from the NRC, SNM-7, and intends to maintain that license during the decommissioning effort.

### 7.2 Description of Decommissioning Activities

In Buildings KA-B (Auditorium), KA-1, KA-3, KA-10, KA-11, KA-13, KA-15, KA-15 garages, and KA-19 (except the Shipping and Receiving area), characterization and D&D have been completed and the Final Release Docket has been approved by DOE. These buildings have been unconditionally released by the NRC and released for unrestricted use by the BCLDP.

In Buildings KA-4, KA-5, KA-6, and KA-7, limited scope characterization, D&D, and final release has been completed and submitted to the IVC.

In Buildings KA-A and KA-2, characterization and D&D have been essentially completed. Characterization Final Status Reports have been approved by the NRC (except for one suite in KA-A).

Building JN-1 is finishing active D&D work, JN-2, and JN-3 have been completed through removal of all necessary above and below grade structures from site.

The West Jefferson External Area work is proceeding with performance of final status surveys of affected and unaffected areas including coordinating IVC site visits upon completion of final status survey unit work by area.

The West Jefferson TRU Staging Pad Area is scheduling and performing of shipments of all of the staged TRU waste to an authorized off site receiver.

Buildings KA-9, JS-1, JS-10, and JS-12 were previously decommissioned and released.

Remaining buildings are not within the current baseline of BCLDP.

At the direction of the DOE, Battelle is re-planning the end state of JN-1, JN-2, and JN-3 to be demolition rather than restoration. This change has an impact on the general outline of the

workflow of Section 2.1.2. The sequence of operations in Section 2.1.3.4 remains generally applicable, but specifics such as JN-3 remaining a long-term staging area is not currently in the planning.

As the BCLDP has matured, its staff gaining experience in general operations, it has been determined that the generation of building specific documents such as QAPs for Section 2.1.4 are no longer required. In similar logic, the extensive, formal review process of the Readiness Review as previously mentioned in Section 2.1.3.3 is *no longer required or performed*. A reduced scope of review is performed as documented in Section 7.2.1.

The schedules discussed in Section 2.1.5 are currently being replanned by the updating of the project baseline. Figure 2.6 was left in its original state, although Battelle acknowledges that the end date is closer to the 2005 in the text. This Figure will be submitted upon completion and acceptance by DOE-CCP of the updated baseline. Since the BCLDP is a 100% DOE funded effort and the wastes generated are DOE owned, DOE's plans, schedules and funding profiles have a significant impact on the decommissioning schedule.

The Draft Baseline Task Plan is included as Attachment 5. It is still in revision at this time.

### 7.2.1 Planning and Assessment

The planning process at the BCLDP requires a detailed review of each task to be performed before work begins and the approval of work instructions. Decommissioning each facility or major part is conducted as a separate effort. The effort-specific review package will be based on a review of the following subjects:

- Decommissioning Operations Objectives
- Site Radiological and Chemical Characterization Report
- Site Decommissioning Operations Release Criteria
- Site Decommissioning Operations Schedule, and
- Support Functions (QA, Health Physics, Radiological Safety Training).

Efforts-specific review packages include, but are not limited to:

Waste Management Plan  
Industrial Safety Checklists  
Work Instructions, and  
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The assessment phase requires that all resources are available and the tasks can proceed. WIs are approved and the tasks are allowed to proceed. The formal review process, termed a Readiness Review has been modified as described above and is used for each task and work procedure, regardless of the scope.

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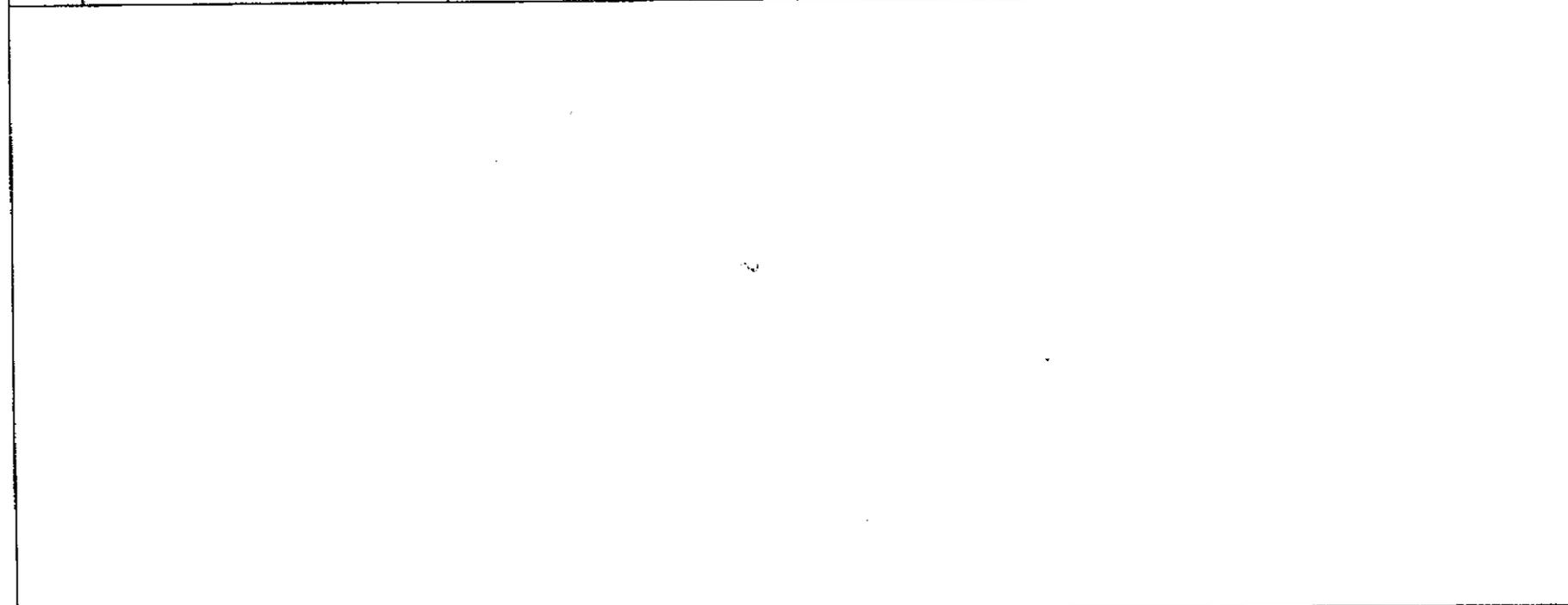
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## Battelle Columbus Laboratory Decommissioning Project Level 2 WBS Summary Schedule

ID	Task Name	Duration	Start	Finish	1st Half											
					Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun		
1	Building JN-1	87 days	Mon 10/3/05	Tue 1/31/06												
2																
3	Building JN-2	0 days	Mon 10/3/05	Mon 10/3/05												
4																
5	Building JN-3	0 days	Mon 10/3/05	Mon 10/3/05												
6																
7	External Area	130 days	Mon 10/3/05	Fri 3/31/06												
8																
9	TRU Waste Shipping	65 days	Mon 10/3/05	Fri 12/30/05												



Project: BCLDP Level 2 Summary Sch  
Date: Mon 10/17/05

Task		Milestone		External Tasks	
Split		Summary		External Milestone	
Progress		Project Summary		Deadline	

**Figure 2.6  
Baseline Decommissioning Schedule for BCLDP**

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