-----Original Message-----
From: John Isaacson [mailto:isaacson@lanl.gov]
Sent: Thursday, June 02, 2005 3:18 PM
To: KIRK.W.OWENS@saic.com
Cc: ewithers@doeal.gov; torig@lanl.gov; sradz@lanl.gov; janecky@lanl.gov
Subject: CSSR data request

Kirk, attached is the data request for the CSSR project.

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Center for Stockpile Stewardship Research (CSSR at TA-3) Data Request

Data Requirement	*Attachment or Reference*	*Data and/or Notes*
1. DESCRIPTION OF NEW FACILITY		
Description of new construction (e.g., floors, walls, support beams, roof, etc)		**There will be more than one building and possibly as many as four. They will be comprised of office space and about 10% light labs.**
Plot plan, building floor plan and equipment arrangement		
Building area required (sq ft)		**The preliminary plan calls for a total of 696,000 ft2**
Features that prevent airborne contaminants from escaping facility		**Fume hoods will be used where needed**
Features that prevent waterborne contaminants from escaping facility		**minimal**
Areas of the buildings dedicated to waste processing and storage		**Unknown at this time**
*Based on the location of the new CSSR in an **already-developed area of TA-3**, we assume that there are no changes or effects on land use, ecological, biological, or wetland resources as a result of this project. Please confirm our assumption.*		**yes**
Information on any cultural resources identified in TA-3 since 2002.		**There are no cultural resources in project area, however the Admin Bldg is an historic building. The Sec. 106 consultation and MOA for its demolition will be finalized in FY05**
Information on any Traditional Cultural Properties identified withinTA-3 project area		**No TCPs in area of potential effect**
Information on any contaminated soils or water in the project area, and how they would be managed.		**No PRSs in the project area**
Schedule (confirm or correct years assumed)		
Design		**2007-8**
Construction		**2008-2010**
Operation		**>2010**
2. CONSTRUCTION OF NEW FACILITY	Use NNSA/EA-1375	
Sources of noise other than those normally associated with construction activities (for example, blasting). List, including number of events and duration		**Use new admin bldg EA as an example of new construction activities and impacts.**
Total land disturbance area during construction (acres)		

• Land area occupied when completed (acres)		
Type of soil disturbance during construction (grading, digging, excavation for basements, etc.), and estimated excavated soil volume and disposal information		
Provide reference for erosion and stormwater protection during construction (stormwater pollution prevention plan for construction activities)		
Emissions during construction	Use NNSA/EA-1375	
Nonradioactive gaseous emissions (kg). List by criteria pollutant and toxic chemicals		
Nonradioactive emissions via water pathway (kg). List regulated chemicals		
Waste generated during construction	Use NNSA/EA-1375	
*Please confirm our assumption that there **will be no radioactive emissions or waste generation** as a result of construction activities.*		Only those, if any, that are normally associated with office and light lab construction.
Hazardous (designate solids and liquids) (m^3)		
Nonhazardous solids (m^3) • Concrete • Steel • Other		
Nonhazardous liquids (Sanitary and other) (m^3)		
Other waste		
Material/Resource Requirements During Construction	Use NNSA/EA-1375	**We don't track any of these resources or their levels of use during construction.** Use NNSA/EA-1375
Water usage peak (gal/day), and total (gal)), include source and capacity		
Electricity peak use (KW), total use (MWhr), include source and system capacities		
• Is local substation or transformer complex required to support facility construction? If yes, does it need to be constructed?		
Gasoline (gal)		
Diesel fuel (gal)		
Concrete (yd^3)		
• Location of concrete batch plant to assist in facility construction?		

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Steel (tons)		
Crushed stone (yd^3)		
Asphalt (yd^3)		
Labor (FTEs) – peak construction workers, total, and time frame		**We do not consider labor since we use fixed price design build contracts**
Doses to involved workers during construction		
*Please confirm our assumption that **there are no radiological hazards associated with the construction** of the facility.*		

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3. BASELINE INFORMATION FOR FACILITIES THAT WILL BE DECOMMISSIONED AND DEMOLISHED	Use NNSA/EA-1375	**CSSR will occupy part of the old SM-43 footprint**
List facilities for D&D (building name & number, associated program/project, and TA); Also identify former function of facilities undergoing D&D		
List number of employees by facility and TA that will be relocated to new facility		**See first table in section 4D of CS SR plan**
Radiological operations for existing facilities		These operations will remain where they are currently located
*Please confirm our assumption that **the facilities being vacated are not radioactively contaminated so do not pose an airborne or worker radiation risk.***		
Air quality (current facility emission data from meteorology and air quality group)		**Unknown (too early in planning process)**
Emissions data for nonradioactive air pollutants (criteria pollutants and toxics)		
Emission rates (peak short-term and annual average)		
Emission release parameters		
• For stack releases - release location, stack height, stack diameter, stack exhaust velocity or flow rate, exhaust air temperature		
• For fugitive releases - release location and dimensions (including height) of vents or louvers from which release occurs		
• Emissions from emergency generators, boilers, etc also need to be specified		
Material/Resource Use for operation of existing facilities		**See CSSR Plan**
Wate usage (list source and use by facility) peak (gal/day) and annual usage (gal))		
Electricity (list by facility if available) - peak use (KW), total annual use (MWhr))		**Heavy electrical use for some experiments. How much is unknown**
Gasoline (gal/yr.)		
Diesel fuel (gal/yr.)		
Other materials and consumables to support operation. (List and provide quantities/yr)		
Waste generated during operations by facility/building. If not available, please indicate which program/projects listed in the Waste Volume Forecast (LA-UR-03-4009, June 2003) will be impacted by the D&D activities, including which TA and building currently houses the program/project.		**See P Division Strategic Plan**

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*Please confirm our assumption that the **facilities being vacated are not radioactively contaminated so do not generate transuranic, low-level or mixed low-level waste**.*		
Hazardous per year (solids and liquids in m^3 and kg per year)		
Nonhazardous solids (metric tons/yr)		
Nonhazardous liquids per year (Sanitary and other in m^3/yr)		
Amount of annual waste water discharge (by facility), include treatment and location of treatment facility		
• Surface discharge		
• Ground discharge		
• Chemicals released in effluents (List chemicals and quantity/yr)		
4. DECONTAMINATION, DECOMMISSIONING AND DEMOLITION OF EXISTING FACILITIES		**It is not clear if there will be any demolition of vacated buildings associated with the CSSR since no decision has been made to D&D theses buildings. They may be back filled by other programs**
List facilities for D&D (building name & number, associated program/project, and TA)		
• Area for each facility (ft^2)		
• Type construction		
Description of sequence and schedule		
Emissions during D&D		
Nonradioactive gaseous emissions (kg). List by criteria pollutant and toxic chemicals.		
*Please confirm our assumption that the facilities undergoing D&D **will not result in radioactive emission via air or water**.*		
Nonradioactive emissions via water pathway (kg). List any contaminants of concern.		
Material/Resource Use for D&D of existing facilities		
Water usage total or annual (gal))		
Electricity (average use per day (KWhr), peak use (KW), total use (MWhr))		
Gasoline (gal)		
Diesel fuel (gal)		
Other materials and consumables to support D,D&D. (List and provide quantities)		
Labor (FTEs) – Provide information on peak and total number of employees for D,D&D of existing facilities		

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Waste generated during D,D&D (indicate units used)		**See D&D data provided for other facilities to use as a model. No specific for this project exists.**
*Please confirm our assumption that **there will be no radioactive waste generated as a result of the D&D of these facilities**.*		
Hazardous waste (solids and liquids (e.g. m^3 and kg))		
Nonhazardous solids		
• Concrete • Steel • Other		
Nonhazardous liquids (Sanitary and other)		
Doses to involved workers		
*Please confirm our assumption that **there will be no radiation dose to workers associated with the D&D of these** facilities.*		
5. NEW (or replacement) FACILITY OPERATIONS		
Radiological operations for new facility		
*Please confirm our assumption that **there will be no radioactive materials used in the new building**.*		Minimal radiological activities will occur, but limits must fit into limits for TA-3
Air Quality during Operations – projections from processing group		**Not available**
Emissions data for nonradioactive air pollutants (criteria pollutants and toxics)		
Emission rates (peak short-term and annual average)		
Emission release parameters		
• For stack releases - release location, stack height, stack diameter, stack exhaust velocity or flow rate, exhaust air temperature		
• For fugitive releases - release location and dimensions (including height) of vents or louvers from which release would occur		
• Emissions from emergency generators, boilers, etc also need to be specified		
Water quality during Operations		**Not Available**
Identify the quantity/quality of liquid discharges from the facility, any contaminants, and how it will be managed.		
Material/Resource Requirements during Operations		**Not Available**
Surface or ground water usage (average (gal/day), peak (gal/day), and total (gal))		
Potable and Process water makeup (average (gal/day), peak (gal/day), and total (gal))		

Electricity (average use per day (KWhr), peak use (KW), total use (MWhr))		
• Is local substation or transformer complex required to support facility operational? If yes, does it exist?		
Gasoline and/or diesel fuel (gal/yr.)		
Natural gas and/or propane (SCF/yr.)		
Other materials and consumables to support operation. (List and provide quantities/yr)		
Labor (FTEs) – Include breakdown by staff coming from existing facilities and new employees. List by year.		**Possibly up to 1000**
Waste generated (specify units)		
Total volume of waste to be generated by operation of the new facilities (see below for break down by waste type)		
Hazardous (solids and liquids)		
Nonhazardous solids		
Nonhazardous liquids per year (sanitary and other)		
A description is needed of how and where each waste type generated by the facility operations would be treated and stored. The treatment and storage capacities of the identified waste management facilities should be provided.		
Seismic studies – identify any seismic hazards specific to TA-3		**Will occupy part of the foot print of the old Admin. Bldg.**
Noise – Identify any sources of noise other than those normally associated with an office building		
6. ACCIDENT ANALYSIS		
*Please confirm our assumption that **no radioactive material will be used in the building**.*		**Don't know yet.**
Describe location and quantity of flammable material within areas of the facility including natural gas, propane, waste, flammable papers, clothing, lubricating oil, chemicals.		
Describe location and quantity of explosive materials in each facility.		
Provide height of exhaust stack used by HVAC system.		
Provide facility structure design basis in terms of PC seismic events (Is it designed to maintain its structural integrity for a PC-2 or PC-3 seismic event)		
List the chemicals and their maximum quantity which are expected to be stored at the facility, where in the facility and how the chemicals are to be stored (e.g., tank, pressurized gas, outside, inside, underground, etc.)		
Provide the latitude and longitude of the center point of the facility.		

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Provide the relative distance between storage locations for each individual chemical.		
Provide the facility outside dimensions above ground level of length, width, and height.		