MEMORANDUM

TO: EPA

FROM: ML Strategies, Inc. LCEE

DATE: August 6, 1998

RE: Response to EPA Comments dated March 19, 1998

The following memorandum represents the formal response of ML Strategies, Inc. and the Project XL participants (i.e., Boston College, University of Massachusetts-Boston, University of Massachusetts-Amherst and the University of Vermont) to the letter and comments dated March 19, 1998. Since that time, the Second National Stakeholder Meeting was held March 24-26, and meetings have been held with LCEE members and various national and local stakeholders. The follow chart provides guidance with respect to whether or how the FPA has incorporated EPA's earlier comments.

Section	Topic	Specific Comment	Reference
I. General Issues	A. Project Should show that there will be no increase in cross-media transfer of chemicals and pollutants		FPA III.A and Lab Env. Man. Standard (EMS) Min Performance Criteria (A.8)
	B. Chemical tracking should be incorporated into the proposal.	- Chemical inventory tracking progress	Lab Standard E.f. and 5/15/98 memo to EPA
		Ensure that outdated unused chemicals are no longer in use	See above and FPA III.A
		Surveys performed often	Annual (Lab inspections more frequent)
		Bar-coding system	No - not feasible
	Baseline Measurement	Explain how a baseline of data from current lab practices will be created.	Currently doesn't exist. Built into FPA - Section IV
	Complete versus Partial RCRA Regulation	Explain how compliance with standards will be enforceable	FPA Section V and 5/15/98 memo
		Expansion of §261.4(c) exclusion may not be appropriately applied in the LPU	No longer sought

Section	Topic	Specific Comment	Reference
		context.	
		Complete RCRA deregulation may not be necessary since the EMP imposes many RCRA-type requirements	We believe complete deregulation is necessary
		Many of the "unused chemicals" are not regulated by RCRA until they are a waste.	True. This is an interpretation and enforcement issue.
II. Comments on Project XL Criteria	A. Superior Environmental A. Performance and Environmental Benefits	1. Explain whether there is potential for the project to minimize the use and/or generation of wastes containing persistent, bioaccumulative and toxic chemicals	The potential does exist but it is not prescribed. See FPA III.A; 5/15/98 memo (section a) and P2 language in Lab EMS E.2.e
		2 and 3. The flexibility to "reuse" materials is not limited by RCRA regulations. To the extent that the current system discourages re-use of unused or partially used virgin chemicals, and the proposed system would enhance such re-use this should be clarified and expanded.	True in theory. Not true in California. In New England, unused or partially used virgin chemicals may be interpreted by inspectors to be hazardous waste.
		3. The proposal should clarify the difference between byproducts and unused chemicals.	No longer applies. Laboratory waste is now the term.
		4. Highlight the benefits of research performed at the institutions in the introductory or background documentation.	Very true, but we have tried to distill FPA to core information.
		5 State aspirations, such as piloting changes to the current grant/funding and purchasing systems that may discourage pollution prevention.	We agree with these aspirations
		6. Waste minimization is emphasized in the proposal. Can you measure/identify how many	P2 is emphasized in revised Laboratory

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		hazards/risks will be avoided? Why/how would this proposal/system decrease the number of spills or accidents.	Standard (Section E.2 and E.3). Also see FPA Section IV.

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		7. Provide further explanation for measuring the number of local schools for which technical expertise will be provided and whether enhanced awareness of graduate students will be measured.	There is a commitment to broadly distribute project information and products (FPA.III.D) and enhanced awareness will be measured (FPA IV)
		8. More clearly state goals and emphasize reduced chemical usage and waste reduction.	See FPA IV.
	B. Stakeholder Support and Involvement	1. Include a future plan for including non-beneficiaries.	See FPA III..C
		2. Provide more information regarding Boston College stakeholder meeting.	See Appendix 6 for stakeholder information
		3. Why did non- beneficiaries fail to attend BC meeting? Will they participate in the future? Future plans?	It is unclear why some stakeholders failed to attend. They will be invited to participate in the future
		4. How will all stakeholders who are unable to attend the meeting in Florida continue to participate.	Web Site and Lab-XL Listserve and/or receive hard copies
	C. Innovation and Multi-Media Pollution Prevention	1. Will EHS personnel have the authority to implement waste minimization options?	To be determined by the institution and defined in their EMP

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		2. Provide further details of the integration of OSHA CHP and the proposed EMP.	EMP format consistent with CHP; EMP criteria now designed not to duplicate CHP requirements. Our approach does support consistent policies
	D. Shifting of Risk Burden	1. Would shifting the point of generation of hazardous wastes from labs to the institution level create any foreseeable risk to human health and the environment?	We do not believe so. The risks (e.g., transport) are no different than the risks associated with transporting raw materials throughout the building.
		2. Can the project illustrate a clear reduction of risk to lab workers or to the surrounding community?	We believe the risk to be very small. This project is not designed to track and document such a reduction
		3. Is there potential regulatory conflicts or problems as a result of this XL Project?	No. Also see Lab Standard A.2 and Lab Standard Appendix A.8
		4. How will the proposal assure that the LPUs will view what was formerly waste as a valuable product?	See 5/11/98 memo #5a
		5. Will this project result in greater accumulation of materials within a lab or increased risk from handling or transportation?	See 5/11/98 memo.
		6. Will RCRA apply immediately after the waste exits the LPU?	EMP applies up to the consolidation point. RCRA applies thereafter

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		7. Please explain the problem with "closed containers"	See original proposal and 5/11/98 Memo #2
		8. What controls or standards will there be for safe storage and the prevention of excessive accumulations of chemicals that be used or might be disposed of, particularly if you conclude a chemical tracking system is impossible to implement?	See Lab Standard Minimum Performance Criteria; See 5/11/98 memo
	E. Monitoring, Reporting and Evaluation	1. Are the universities currently regarded as SQGs?	Only Boston College
		1. Provide with baseline data concerning chemical usage, wastes generated, treatment	Built into the FPA. See III.G and IV.
		2. Is there a plan for determining what materials and how much will be reused and recycled?	Yes. See III.G and IV. of the FPA
		3. How will you track costs and savings?	To be defined by institution. Each XL Participant carefully tracks waste disposal costs which come from EHS budget
		4. Outline how audits and corrective action programs will work	To be defined by each institution. See ISO 14001 guidance materials for background
		5. Will you collect data on lab worker health and exposure	Not for the purpose of this project
		6. Fully outline plans for measuring the success/failure and environmental benefits of the project.	See FPA III.G and IV; See 5/15/98 memo

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		7. Will each treatment protocol submitted to the Technical Review Committee provide information on potential superior environmental benefits and the consequences of not adhering to treatment protocol?	Yes.
	F. Transferability	1. Do you anticipate that the results from this pilot could be transferable to other labs?	Yes. See FPA III.D and E
		2. Further define parallels between the EMP and the CHP similar to the integrated contingency plan rule	Performance-based standards. Have tried to distill not expand FPA
	G. Feasibility	1. Can you guarantee that this XL Project will be more workable in research laboratories than the current system?	We believe it will. For that reason, we propose piloting this system to evaluate
	H. Cost Savings and Paper Reduction	1. Requests further information concerning EH&S program costs for management of hazardous wastes from laboratories.	Will be incorporated into future annual reports to evaluate progress
		2. Asks for more information about the use of 3.25 FTE's at the UVM to manage RCRA compliance.	No further information provided
		3. Provide further information concerning what the proposal deems "non-essential" regulations. Asks for the genesis of the regulations (environment vs. Worker health/safety) and if other prudent practices apply?	We have not talked of non-essential regulations. We have focused on reinventing better regulatory systems. "Prudent Practices in Laboratory" as published by the National Research Council is widely followed.

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III. Comments on Specific Regulatory Flexibility Requested	1. Expansion of §261. 4 exclusion	May not be appropriately applied to LPU	We no longer seek relief under this provision
	2. Definition of generator	clarification - not a request for response	Current FPA now seeks to change this definition by redefining "person"
	3. Manifest Requirements	Requests that relief from manifest requirements be removed since XL Participants will not transport hazardous wastes	Agreed
	4. Pre-Transport Requirements	See above	Agreed
	5. Labeling	Makes clear that "hazardous waste" is not required in federal regulations	Understood. RCRA labeling requirements vs. the realities of small containers have been a source of NOVs.
	6. Emergency Preparedness and Response	Relief not necessary because only apply to accumulation areas	Agreed.
	7. Satellite Accumulation -	Asks whether we are seeking the ability to accumulate a total of 55 gallons per waste stream per lab.	Yes. See Lab Standard Appendix A.3 and 5/11/98 Memo #1
	8. Satellite Accumulation - time	States that "relief from the time limit on removing full containers will be tied to the demonstration that the EMP system will be able to track chemicals and by-products and the ability to account for and manage chemicals in the LPU	XL Participants accept this responsibility.
	9. Satellite Accumulation - single container	Makes clear that this requirement seeks relief from Mass regulations	Agreed

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	10. Standards applicable to Transporters of Hazardous Waste	Requests that relief from these requirements be removed since XL Participants will not transport hazardous wastes	Agreed
	11. Closed Container	Request for further definition. Concern that volatiles escaping from open containers may result in noncompliance with Subpart CC of RCRA.	See 5/11/98 Memo #2; Laboratories and the institutions are committed to worker safety and compliance with OSHA. We are not talking about open 55-gallon drums.
	12. Small Scale Treatment	Requests additional information to determine if "treatment in container" exemption applies.	Will be determined on a case-by-case basis as part of the project.
B. Component 2 - Small Scale Treatment			Has become a state issue.
C. Proposed Environmental Management Standard	Specific Comments	1. Paragraph A1 will change with flexibility agreement	We do not anticipate this changing
		2. Paragraph A.2 should clarify that the standard does not supersede other parts of RCRA or other environmental statutes.	Clear in A.1. that RCRA is not superceded except in the lab
		3. Definitions Byproducts Env. Management Officer Hazardous Chemical Hazardous Substance	Address, as appropriate, in the revised Lab Standard
		4. Section C. Hazardous Waste Management should clarify that the institution is responsible for RCRA compliance with a commitment by top management	Organizational responsibilities are very clearly spelled out in the EMS Section D .

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		5. Section D. Organization responsibilities should include that the responsibility for policy should bc over-riding and explicitly stated	Not clear what this means. However, one of the issues (see FPA II.B) is the unique culture of institutions.
		6. What is meant by Section D. 2?	Removed
		7. Section D.8 should state that personnel handling hazardous waste and laboratory process byproducts receive appropriate training	That is an organizational responsibility for Haz Waste. See Lab Standard F for clear definition of training requirements for lab workers.
		8. E.2 How will the EMO be trained to determine risks and how will this be done? Concern expressed about loophole and applicability of EMP. Also expressed interest in more stringent requirements for tracking chemicals, wastes and chemical usage.	See definition of Environmental Management Officer in Lab Standard (B). Training to be defined by the institution. This standard represents a better system for managing chemicals and waste and P2

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		9. Minimum Performance Criteria - Requests for more.	An institution implementing an EMP and meeting the proposed minimum performance criteria will have an exemplary system for managing hazardous chemicals and waste in laboratories.

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