

US EPA ARCHIVE DOCUMENT

December 6, 1999
Draft

Rita Schenck, Ph.D.
Executive Director
Institute for Environmental Research and Education
9910 S.W. 206th Court
Vashon, WA 98070

Gerald Hartford, Jr. P.E.
President
Henning, Metz, and Hartford and Associates
445 2nd Avenue S.W.
Fargo, North Dakota 58103

Dear Ms. Schenck and Mr. Hartford:

We were pleased to receive the XL for Communities proposal submitted by the Institute for Environmental Education and Research (IERE) and Henning, Metz, Hartford and Associates (HMH& Associates) dated September 24, 1999. We believe that the concepts presented in the proposal are consistent with the XL for Communities themes of community-based environmental protection and testing new and innovative approaches at the local level designed to result in greater environmental quality. We look forward to working with you over the coming months.

The proposal has undergone review by an internal team consisting of representatives from EPA Regional and Headquarters program offices. The team recognizes the value of the project's goals of developing a community-based Environmental Management System (EMS) linked to the permitting, building and operation of community-based livestock-processing plants. EPA believes the potential for an EMS developed with this focus is exciting and significant for environmental protection in agricultural communities. EPA's review has also identified a need for additional information to help us develop a more specific understanding of how the project's goals will be accomplished.

To enhance our understanding and the potential of the proposal, we are requesting information about how various aspects of the project will be developed, designed, and implemented for the various facilities that will benefit from the expedited permitting process that you have requested through Project

XLC. We have included a number of questions in an enclosure that address these aspects of the project. These questions cover public involvement in selecting communities where plants will be built, the design and operation of the EMS, wastewater discharges from the processing plants, solid and hazardous waste handling, and air emissions.

In requesting this information we have made a distinction between questions and information needs that need to be addressed prior to selecting the project for Final Project Agreement (FPA) negotiation and information and questions that will need to be addressed, but should we decide to move to FPA negotiation, could be deferred to that phase of the XLC process. You are, however, not limited to providing this information at a later date -- it can be provided at any time, and if provided early could enhance both our review and selection process as well as subsequent development of a project agreement.

The information collection prior to selection focuses on clarifying how the community EMS and various aspects of the meat processing facilities will function as well as developing an understanding of each of our respective roles in the project and the establishing regular communication between the sponsors, producer organizations, EPA, and the States. This latter information, understanding our roles and communication, will be especially important as the first facilities are sited and permitted, perhaps without the full benefit of the work we do together through Project XLC. EPA's more detailed request for specifics on how the plants would operate can be addressed at a later date.

We welcome the opportunity to speak with you regarding the questions and issues that we have raised. Please contact Jody Hudson or Dave Erickson at 913-551-7179 or 913-551-7162 on my staff to set up a time for this discussion. At that time we can discuss how best to respond to the enclosed questions -- whether it be through a revised proposal or an addendum. We feel this discussion should also involve each of the States that will ultimately be involved in the implementation of this project. We will plan to include them in our discussions.

Thank you for your interest in Project XLC. We look forward to our continued dialogue and further development of your proposal.

Sincerely,

William W. Rice,
Deputy Regional Administrator

Enclosure

cc: MDNR

December 6, 1999

U.S. EPA Questions and Comments
Agricultural Community EMS Community XL Proposal

COMMUNITY SELECTION PROCESS AND PUBLIC INVOLVEMENT

Information Needed Prior to Project Selection

The XLC process envisions a strong element of public support and participation. The project proposal indicates that livestock processing plants will be established in all four states in Region VII. In general EPA would like more information on the process that will be used to select communities for these plants. In particular it will be helpful for EPA and the sponsors prior to project selection to discuss the following:

- < What role does IERE and HMH & Associates have in siting these facilities? Conducting public outreach to the community?
- < What role does the State(s) have in selecting communities and in the public participation and outreach components of establishing these plants?
- < What role do the producer organizations have?
- < What role does EPA have in selecting communities for the location of these plants? What role will EPA have in the public participation process?
- < Does an additional/different process need to be established and agreed upon to address the needs of the Project XLC stakeholders for information and involvement as communities are selected for location of the plants?

To the extent that IERE and HMH & Associates have knowledge or influence over these processes, please respond to the following:

- < What specific communities have been considered so far?
- < By what means will these communities be contacted?
- < When a community is considered, what form of public outreach will be conducted? How will IERE and HMH communicate with the community?

- < What issues are covered when engaging the community?
- < What approaches will be used to gain community acceptance and assess this support?
- < What role will the community have in the decision-making process?

ENVIRONMENTAL MANAGEMENT SYSTEM

Information Needed Prior to Project Selection

Your concept of a community-based EMS is intriguing. In general prior to project selection EPA would like more information on how a community-based EMS would work by comparison with a facility-based EMS. Specifically:

- < If community means community participants, which community participants (meat packers, meat producers, other suppliers, citizens, leaders, or groups) will have an approved EMS? What timeline (approximate) do you envision for bringing in these community participants and for implementation of a functioning EMS at each participating facility?
- < Are all the participants with EMS's going to be ISO 14001 certified? If not, are they self certifying by using third party ISO 14001 trained auditors?
- < In some areas, current animal waste production exceeds the amount of land available for application. This facility could encourage increased animal production. Would you intend to consider animal waste handling through the entire animal life cycle, or just at the plant itself?
- < How is a "Vendor Management system" different from ISO-14001?
- < What amount and type of public participation do you envision will be needed to develop and implement a community-based EMS over the life of the facility? What challenges might we face in doing this in rural farming communities with less than 3,000 population?
- < If one currently exists, please submit an example of the type of EMS you intend to use as a basis for the XLC Project. Areas of particular interest to EPA are the environmental policy, some of the significant environmental aspects you expect to deal with, examples of EMS Projects you expect to have, and discussion of internal and third party auditing. If you do not currently have an example we would plan to discuss and/or develop a prototype or model should we move to FPA negotiation.

Information Not Needed Prior to Project Selection

- < Measurements are an important part of the EMS process. What are we going to use for baselines? You mentioned the industry averages for waste, for water use, for holding times, etc. That is acceptable, but we hope that you will benchmark your new operation and set some

goals for what you expect to produce using the enhanced systems. This information is not required prior to selection.

WASTEWATER

Information Needed Prior to Project Selection

Prior to selection we request that you supply the following information about existing facilities of the type that you propose to design and operate in Region VII. We will need this information prior to proceeding to Final Project Agreement negotiation. We do not believe that the technical or design information that EPA is requesting here is Confidential Business Information (CBI). If HMM believes that it is please let us know so that we can make arrangements to protect your interests.

Design questions:

The project proposal indicates that similar plants have been built in Europe. What are the specific locations of these facilities?

- < What types of treatment facilities do these plants use?
- < Do you have discharge data for BOD, TSS, and Ammonia for these facilities? If so, please share it with us.
- < What are the anticipated qualities of the untreated wastewater with respect to Flow, BOD, TSS, and Ammonia?
- < For instance, what are anticipated headworks loadings to an onsite treatment plant or a POTW when the plant is operating at full capacity?
- < Please discuss the technologies you propose to use to minimize water and other resource usage throughout this process. For instance, will you reduce water usage by holding fewer livestock in pens on-site, therefore reducing pen clean up usage, or will you improve the internal systems to use less water during processing, or will you use pneumatic cleaning techniques which dry and eliminate the need for water?

Information Not Needed Prior to Project Selection

The following information will not be needed prior to selecting this project, but will be necessary for EPA and the State to assist in and agree to accelerating a permit package. These questions could be considered part of the initial “checklist” created to accelerate permitting. We reserve these questions for later stages of the XLC process with the understanding that all of the facilities permitted through this

XLC project will meet all applicable Federal and State environmental laws and regulations.

Site specific considerations are very important with respect to discharge or reuse of wastewaters. Each site is somewhat unique, and each of the chosen methods of wastewater treatment and disposal creates several questions.

If a surface water discharge is chosen:

- < New dischargers in the Simple Slaughterhouse Category must meet the New Source Performance Standards (NSPS) set out in 40 CFR §432.15. These regulations limit BOD, TSS, Oil and Grease, Fecal Coliform, and Ammonia. What type of treatment system is anticipated?
- < Have you prepared designs for a treatment plant that would meet these minimum technology requirements?
- < In most locations, state water quality standards create the need for tighter limitations on BOD or Ammonia and other nutrients, e.g., phosphate. Have you considered how you will be able to build to suit these situations while still meeting ambitious time lines for plant construction and operation?
- < How will sludges from the onsite treatment plant be handled and disposed?
- < Discharge standards are production-based. Specifically, the anticipated “Live Weight Killed” (LWK) will need to be known in order to calculate the technology-based permit limits (even if local water quality standards require a more stringent limit.)

If discharge to a Publicly Owned Treatment Works (POTW) is chosen:

A POTW receiving the wastewater may have specific local limits with which it requires the facility to comply and install pretreatment capabilities. Prior notification must be provided to the POTW with assurance that its local requirements will be fulfilled. POTWs will often impose such requirements instead of upgrading their own plants to accommodate increased waste. Other general requirements for the pretreatment program are found under 40 CFR 403.

- < These new facilities will increase both hydraulic and organic loadings to the POTW. By what means will you assess the ability of the receiving POTW to continue to meet secondary treatments for BOD and TSS?
- < Slaughterhouse wastes contain high levels of ammonia and organic nitrogen. For this reason, a POTW receiving this waste may require ammonia limits in its’ NPDES permit and be required to upgrade. Have you considered how you will be able to upgrade POTW’s in these situations while still meeting ambitious time lines for plant construction and operation?

- < Will treatment agreements with receiving POTW's address the additional sludge production associated with these new loadings?

If surface irrigation is chosen:

- < Surface irrigation is being used at several Kansas facilities. Are you considering this as an option? If so, what are your calculated site loadings in terms of hydraulic loading, nitrogen loading, and phosphorus loading?
- < Have you located suitable application sites near intended plant sites?
- < In Missouri, the MDNR sets limits on hydraulic and nutrient loading. Can you meet these criteria?

Beyond the "site specific considerations", information will be needed on what specific processes will be performed on site. Specifically, this will determine which standards apply -- those for "Simple Slaughterhouse" vs. "Complex Slaughterhouse" vs. "Low-Processing Packinghouse" vs "High-Processing Packinghouse" vs. "Small Processor", etc. (as noted at 40 CFR 432). This information will not be needed prior to project selection.

AIR AND ODOR EMISSIONS

Information Needed Prior to Project Selection

- < What air emissions are expected and how is air permitting being handled? Since these plants are being proposed for location near small cities or towns, what assurances of odor controls being adequate to prevent complaints and violations of Missouri's odor regulations can you provide?

HAZARDOUS WASTE

Information Needed Prior to Project Selection

- < What hazardous materials do you expect to utilize at this plant? Will there be used containers, laboratory wastes or equipment maintenance residues to dispose of?

WASTE HANDLING

Information Not Needed Prior to Project Selection

- < The engineering firm has indicated the use of composting to handle some of the animal wastes from the facility. This dry handling approach will require a permit from the Missouri Solid

Waste Program and runoff will have to meet the requirements for containment and monitoring of the Missouri Water Quality Program. Please prepare a flow chart which provides information on the wastes which will be directed to the composting operation, the sanitary sewer, the drainage patterns, and the solids recovered for transport to rendering or hides for tanning, etc. This will enable us to evaluate the potential for recycling, reuse, or waste reduction, and will allow us to advise the community that is chosen to house the new facility. If we see opportunities for additional solid waste reuse/recycling or pollution prevention we will share them with you first.

FOOD SAFETY AND ENVIRONMENTAL ISSUES

Information Needed Prior to Project Selection

- < What will be the impact on water usage and on wastewater quantity and quality of implementing the Food Safety and Inspection Service's HACCP at the proposed facilities? (HACCP – a program for preventing microbial/bacterial contamination of meat.)
- < Will implementation of HACCP conflict with or limit opportunities for environmental pollution prevention at the proposed facilities?

OVERALL SCOPE OF THE PROJECT AND COMPLIANCE SCREENING

Information Needed Prior to Project Selection

- < Given the fact the XLC is a pilot program, can you tell us what expectations you have for the overall duration and scope (e.g., numbers of facilities) of the project?

Information Not Needed Prior to Project Selection

- < EPA and the Sponsors will need to jointly develop a process for compliance screening for the producer cooperatives that will own the facilities permitted under this XLC project.

