

US EPA ARCHIVE DOCUMENT

## Meeting Summary

### Steele County XL Community Project Annual Participants Meeting

July 17, 2001  
Steele County Administration Center  
630 Florence Avenue  
Owatonna, Minnesota

Representatives of the Steele County XL Community project's nine industrial participants, the Environmental Protection Agency (EPA), the Minnesota Pollution Control Agency (MPCA), and the Owatonna Wastewater Treatment Facility (OWWTF) convened for three hours on July 17, 2001, in Owatonna, to discuss (1) implementation of the project to date; (2) activities to complete commitments for Phase I and ideas for Phase II; (3) format and membership of a leadership group; and (4) ideas to find a local coordinator for the project.

#### I. Opening Remarks

**Peter Connor, Mayor of Owatonna, Minnesota**

Mayor Connor thanked the group for coming together to further discuss a project that has the possibility to improve the environmental quality of the City of Owatonna. He felt that the group should be proud of its accomplishments to date and is pleased that the businesses of Owatonna are continuing to move forward with this project. He specially thanked Dennis Sershen for his early leadership role and commitment on this and other projects in Owatonna.

#### II. Review of Project History

**Abeer Hashem U.S. EPA, Region 5 (Chicago)  
Kristina Heinemann, U.S. EPA, Headquarters**

Abeer Hashem addressed the group and expressed her hope that communication between all of the entities will only continue to improve over the next year. She asked the participants to think about what EPA could do to help and stated she was looking forward to a robust conversation about ways to further improve this important project.

Kristina Heinemann reviewed with the group the initial goals and commitments of the project as agreed to by the participants in May 2000 and formalized in the Final Project Agreement (FPA).

#### Goal of the Steele County XL Community Project

*By working together, the participants recognize the benefits of information and technology sharing, group problem solving, and government partnerships. The opportunities created by this project will benefit not only the participating companies, but also the environment for the*

*community as a whole. Goals for Phase I of the project include a cumulative reduction of regulated wastewater effluents and significant reductions in overall water usage. The proposed Phase II would expand to a multimedia approach, setting additional goals for reductions in air emissions, solid waste, hazardous waste, chemical storage, and community sustainability.*

### **Sponsor Commitments to the Steele County XLC Project**

- Metal Discharge Reduction Goals—20 percent reduction goal for nickel, chromium, copper and zinc for the Owatonna Sponsors.
- Effluent Discharge Reduction Goals—20 percent reduction in BOD, TSS, and TKN for the Blooming Prairie Sponsor.
- Water Use Reduction Goal—10 percent reduction in total water flow to the OWWTF and the BPWWTF from the sponsor facilities.
- Development of a storm water plan at each facility and educational materials for employees and residents to minimize storm water infiltration into the sewer system.
- Environmental Management System (EMS) Training and EMS or Pollution Prevention Audit at each facility.
- Annual Progress Report Documenting Project Achievements.

Ms. Heinemann reminded participants that one of the major purposes of Project XL was to test new models of protecting the environment and stated that EPA is very supportive of the Steele County project because of the potential to test a unique model for commercial/industrial environmental problem-solving on a community level. If successful, EPA is looking forward to sharing it with others as a way of addressing community-wide environmental challenges and opportunities.

On October 6, 2000, EPA promulgated a site-specific rule giving flexibility committed to in the FPA to the OWWTF for the six Steele County XLC industrial participants discharging to the OWWTF. The four main provisions in the rule are as follows:

- Allows change from concentration-based limits to mass-based limits;
- Sets out the goal of a 20 percent reduction in specific metals, which when achieved may trigger reduced monitoring frequency;
- Gives discretion to the WWTF to not require participants to monitor for pollutants not present; and
- Gives discretion to publish significant non-compliance events on MPCA's Web site rather than in the local newspaper.



**III. Review of Progress to Date—Metals Reduction**  
**Andrew Ronchak, Minnesota Pollution Control Agency (MPCA)**  
**Dean Nelson, Owatonna Wastewater Treatment Facility (OWWTF)**

Andrew Ronchak stated that after EPA finalized the site-specific rule in October 2000, the MPCA worked with the city to change permits for the six companies that are permitted by the OWWTF and involved in the project—they were issued in early 2001. The state still needs to change the permit for the OWWTF, and that is currently in the queue at MPCA.

Dean Nelson clarified for the group that in the process of converting the concentration-based limits to mass-based limits, some of the resulting mass-based limits were more made more stringent. It was not the XI Project that caused mass-based limits to be reduced. The local limits were made more stringent based on what the city could accept and still be in compliance with its NPDES permit requirements. In addition to the new permits for these six companies, the City of Owatonna passed a new ordinance allowing the flexibility provided by the EPA site-specific rule.

Mr. Nelson went on to present information about progress to date on metals reduction, based on analysis from the OWWTF effluent sampling. Please see the following tables and discussion that follows.

**Metals in Industrial Wastewater (lbs/d)**  
**First Half of 2000 v. Second Half of 2000\***

	Chromium	Copper	Nickel	Zinc	Flow
1 <sup>st</sup> half, 2000	0.46	0.22	1.04	0.83	0.38
2 <sup>nd</sup> half, 2000	0.53	0.18	1.37	0.82	0.41
Percentage increase or decrease	-16%**	16%	-32%	1%	-9%

\*\* A negative value represents an increase in the discharge.

**Metals in Industrial Wastewater (lbs/d)**  
**First Quarter 2001 v. 2000 Year Average**

	Chromium	Copper	Nickel	Zinc	Flow
Average for 2000	0.49	0.20	1.21	0.83	0.39
First quarter 2001	0.23	0.04	0.70	0.94	0.40
Percentage increase or decrease	52%	80%	42%	-14%	-2%

**Metals in Industrial Wastewater (lbs/d)**  
**2000 Year Average v. Five Year Baseline**

	Chromium	Copper	Nickel	Zinc	Flow
Five Year Average***	0.85	0.31	1.46	1.26	0.42
Average for 2000	0.49	0.20	1.21	0.83	0.39
Percentage increase or decrease	42%	36%	17%	35%	6%

\*\*\* This is the baseline used in the EPA Steele County XLC site-specific rule.



**Metals in Industrial Wastewater (lbs/d)**  
**First Quarter 2001 v. Five Year Baseline**

	Chromium	Copper	Nickel	Zinc	Flow
Five Year Average	0.85	0.31	1.46	1.26	0.42
First Quarter 2001	0.23	0.04	0.70	0.94	0.40
Percentage increase or decrease	72%	87%	52%	26%	4%

\* Year refers to calendar year, January – December.

Mr. Nelson said that he was pleasantly surprised by the data. [It should be noted that the results presented in the tables above do not take into account or adjust for any fluctuations in production.] He explained that the most meaningful table to look at is the *Year 2000 Average versus the Five Year Baseline* since the longer time frame comparison provides a more accurate picture by evening out peaks and valleys in discharge due to production or maintenance activities. This table shows that in the first year, reduction in metals has far outpaced the goal of the FPA—20 percent reduction over five years. Nickel is the only metal that did not meet the 20 percent goal in the first year. Total flow is also only down by 6 percent compared with the goal of 10 percent in the FPA. All agreed that this was significant progress to date. The question came up as to how much data the WWTF should have before making monitoring frequency adjustments for each of the facilities involved. Because there is likely to be variability in these numbers over time, Mr. Nelson committed to looking at the data again in another six months, and if the trend toward reduction continues, he would give further consideration to using his discretion to implementing the reduction in monitoring frequency provided for in the Steele County site-specific rule.

When asked what the group thought contributed to the metal reductions, SPX stated that they had just changed their process from a nickel-chrome plating line to a nickel-tin plating line and that may be contributing to the reduced chromium loadings. SPX also explained that during this transition (the first quarter of 2001), they were running both processes simultaneously for awhile. Now they are only running the nickel-tin line and would expect chromium discharges to be further reduced in the next reporting cycle. Cybex shared that they had moved to a self-contained parts-cleaning washer, which they hoped was contributing to reduced metals loadings. Cybex indicated that the XLC project had at least in part been a motivation to move to the self-contained unit.

When asked about whether these reduced loadings were potentially due to lower production or other factors, the participants generally agreed that production overall had not fallen precipitously and the group believed that these reductions were due to the commitment on the part of the company to improved environmental practices at these facilities. It is important to note that the Blooming Prairie representative from Atofina reported that production has been down significantly at his facility. Atofina explained that when production is down at their facility, flow increases and pollutant loadings, particularly TSS (they are OK with their BOD loadings) are not necessarily reduced because they are producing smaller batches and therefore cleaning out the machinery more frequently. Five years ago the Atofina plant significantly reduced its pollutant discharges. The chemical processes at the Atofina plant are fundamentally different from those at other facilities involved in the project. To date, the City of Blooming Prairie has not reissued Atofina's permit.

When asked how the XL Project participation has helped companies achieve these reductions, several participants mentioned that it helped raise awareness in their companies, especially at the upper management level, and made it easier to request/obtain resources and have discussions with management and employees about the importance and benefit of environmental improvements. Others talked about how pressure from their customers was helping them move towards ISO 14000 certification (e.g., Ford has encouraged its suppliers to invest in ISO 14000 certification).

#### **IV. Review of Progress to Date—Stormwater Flow Reduction**

Another goal of this XL project is to reduce overall water flow, particularly from storm water into the OWWTF. Mr. Nelson explained that when many of the residential structures in Owatonna were built, sump pumps were connected directly into the sanitary sewers. To date (from the period 6/1/00 to 7/1/01) the OWWTF has visited 1,964 residences and found 205 sump pumps connected to the sanitary sewer, half of which have already been disconnected. Mr. Nelson estimated that the average sump pump pumps 10 gal/min. Extrapolating this figure to all of Owatonna's 6,000 residences, Mr. Nelson estimates that 12 million gallons per storm event of rain water or groundwater is being sent through the sanitary sewers, overloading capacity at the OWWTF (the OWWTF was designed for a capacity of 5 million gallons per day), causing overflows of storm water and sanitary sewer effluent and increasing costs. He feels the city's efforts to correct sump pump drainage are going well and would like the XLC participants to distribute the city's "Storm Water Compliance, Be a Good Neighbor" brochures at their companies to raise awareness about the city's efforts to increase compliance with its storm water ordinances.



## V. Key Challenges

The group stated that the biggest challenges to doing environmental improvement work is cash flow and convincing management of the value of making an investment. A large part of this discussion focuses on certainty of the returns from that investment. The group also mentioned the challenges in working with new chemicals. There is often a steep learning curve. The group mentioned the need to have hardware manufacturers and chemical manufacturers work together to minimize the environmental impacts at the facility level. Participants stated that they would like to hear from EPA through this XLC forum about the regulatory horizon—what regulations are coming down the pike before they are actually promulgated. They do get this type of information from their trade association, the National Metal Finishers Association.

## VI. Next Steps

### Phase I

Participants talked about wanting to use this forum to:

- Share information about what is working and lessons learned (and perhaps combine that with tours of each of the participating facilities on a rotating basis);
- Discuss cooperative cost reduction strategies such as sharing Material Safety Data Sheets (MSDS's) or collaborative hazmat transport;
- Identify methods for and share information about water reduction in their facilities;
- Receive regular updates from OWWTF regarding metals and water flow reduction; and
- Get training and information on EMS development and improving efficiencies.

The group talked about the use of available resources from MNTAP—pollution prevention, EMS audits, and on-site assessments. In the past, Mr. Nelson has spoken to Cindy McComas, who could possibly be a resource for this group in the future. Wenger mentioned that they once had an intern work with them in that had been available to them through MNTAP. The group agreed that it made sense to do training first. In that way a facility would have a leg up in establishing goals for any subsequent assessment or audit.

Mr. Ronchak agreed to schedule a three- or four-hour training on EMSSs, including: What is an EMS? What are the key elements? Where do I start? How does an EMS relate to meeting the goals of the XLC Project? What are the associated regulatory benefits? How do EMSSs improve efficiency and reduce costs? The training might also present a prototype EMS. The group agreed that fall 2001 would be a good time for the training. After the training several participants thought it would be valuable to have independent auditors come and conduct audits of their facilities to identify areas of possible efficiency improvements. Mr. Ronchak stressed that EMS audits are not compliance audits and focus much more on self-assessment. Compliance problems are not reported to the state or other regulatory agency, but are reported to the facility itself to allow the facility to make improvement to its operations. The one exception would be an instance where the audit revealed an imminent threat or endangerment to public health or the environment.



Mr. Ronchak also clarified that the type of audits being discussed in the context of the XLC project are not the same level of rigor as those required to be ISO 14000 certified (where an independent outside certified auditor would need to be retained). This group could start out with self-audits and then could move on to ISO 14000 certification if they desired to. This would be a business decision that each company would have to make for itself.

One member of the group mentioned that some EMS auditors provide free training as a promotional marketing tool hoping that they then will sell you additional services. Another suggestion was made to invite the smaller companies in town to participate in any training that the Steele County XLC group sets up.

The group mentioned that it would be helpful if US EPA could provide a letter of support highlighting progress and accomplishments of the XLC project. This would be a very useful tool for the folks involved in the XLC group to get the attention and support of their upper management.

## **Phase II**

Phase II of the Steele County XLC would focus on multimedia permitting for the community as a whole, from hazardous waste and water quality to air permitting. In order to move forward with Phase II, the group would need to identify what challenges it faces with regard to air permitting and the handling of hazardous waste and do some analysis. A few examples came up in discussion of the disposal of hazardous waste. In waste disposal, is it possible to combine acids and bases to lessen the toxicity of some wastes? Could there be economies of scale achieved if companies got together to ship hazardous waste (an Incubator- Plus model)? Hazardous waste disposal imposes a tremendous cost to industry. Implementation of an EMS could aid in determining where the focus should be for a Phase II.

Suggestions were made to focus on environmental challenges that companies share and how to get the best financial value and value for the environment with every expenditure the company makes—the biggest environmental bang for the buck. Another goal should be to have the best working conditions at the facilities for their employees.

## **VII. Leadership and Organization of the XL Project Group**

### **Coordinator**

The group discussed the need for a coordinator (including the possibility that the coordinator could be paid) and brainstormed various methods for getting one, including writing grants or finding a college or graduate student to assist them. The group felt strongly that the coordination function should not be left to just one person, but should rather fall to several individuals as a coordinating body or a small committee whose membership would rotate on a regular basis. A group established to oversee the implementation of the Steele County XLC could model itself and its operations after active local groups that already exist, e.g., the Steele County Safety Council or Steele County Care. A Steele County Environmental Council, if formed, could be a

natural extension of the Steele County XLC group.

The following organizations were suggestions by the group for where assistance in funding a coordinator might be sought: McKnight Foundation (Project 20/20 Initiative Fund); an LCMR grant from the Minnesota Department of Natural Resources; EPA's Sustainable Communities or Pollution Prevention grants; the Owatonna Foundation (a letter of support from EPA to support a grant application to the Owatonna Foundation would be helpful); and the U.S. Department of Transportation permit dollars that are due back to the state. Federated Insurance, which was involved in the early stages of the project, is another local organization that could be tapped. The group is initially focused on Phase I and agreed that Phase II would require a different level of commitment and coordination.

#### **Executive Committee**

To reduce the burden or coordination on any one individual, volunteers agreed to serve as an interim Executive Committee.

#### **The members include representatives from:**

- **A representative from SPX;**
- **Mark Nichols from Viracon; and**
- **Jeff Hollister from Cybex.**

Dean Nelson and Andrew Ronchak would also serve as silent partners. The interim executive committee agreed to:

- Meet six times a year at set times;
- Coordinate with Mr. Ronchak to set up the EMS training;
- Search for funding for a coordinator;
- Set up an e-mail group list;
- Write annual progress report with assistance from meeting summary and Mr. Nelson and Mr. Ronchak;
- Schedule larger group meetings (quarterly, on a rotating basis at each facility); and
- Meet prior to scheduling larger group meeting in the fall of 2001 (which might be done in conjunction with the EMS training).