



## Factsheet on Environmental Cooperative Agreement between Cook Composites and Polymers Co. and Wisconsin Department of Natural Resources

On October 1, 2001 the Wisconsin Department of Natural Resources (DNR) October 1, 2001 will sign an Environmental Cooperative Agreement (Agreement) with Cook Composites and Polymers Co. Saukville Facility (CCP). This Agreement was developed under Wisconsin's Environmental Cooperation Pilot Program pursuant to Section 299.80, Wis. Statutes.

### Facility and Project Background Information

The CCP Saukville facility manufactures polyester and alkyd resins used in a variety of applications including the coatings, sanitary, automotive and marine industries. The facility, located at 340 Rail Road Street, Saukville, Wisconsin, approximately 25 miles north of Milwaukee, began resin production in 1949 and employs approximately 75 full-time staff in Wisconsin.

The CCP Saukville facility's current production capacity is approximately 52 million pounds of resin per year, produced in more than 3000 batches. The primary wastes generated at the facility are reaction water, spent solvents, filter cleaning residues, and miscellaneous off-spec materials. The facility currently disposes two of the waste streams (reaction water and solvents) in an onsite Resource Conservation and Recovery Act (RCRA) licensed hazardous waste incinerator.

In 1998, the CCP Saukville facility generated approximately five million pounds of a waste stream known as "reaction water". The reaction water stream is considered characteristically hazardous for ignitability based on the presence of low concentrations of volatile organic chemicals. The reaction water is occasionally characteristically hazardous for corrosivity due to low pH. Additionally, in 1998 the CCP Saukville facility generated approximately 1.7 million pounds of waste solvent and used it as a supplemental fuel in the incinerator.

In 1999, CCP evaluated how it wanted to comply with a new air regulation called the Hazardous Waste Combustion (HWC) MACT that was scheduled to take effect October 1, 2001 or 2002<sup>a</sup>. One way of complying with this regulation is to not burn hazardous waste. Like many other facilities with hazardous waste incinerators, CCP chose this option. As part of this Agreement, CCP made the commitment to stop burning hazardous waste by October 1, 2001. CCP will stop using its incinerator as a hazardous waste incinerator and "close" it using the RCRA hazardous waste closure requirements.

CCP recognized the economic, environmental, and community relations benefits associated with moving to waste minimization and pollution prevention approaches to manage its hazardous wastes and other waste streams associated with the reaction water. The challenge was to synchronize CCP's technical and business evaluation of waste minimization and pollution prevention options with the



regulatory requirements and regulatory review of DNR and U.S. EPA staff from many different environmental programs including, among others:

- re-issuance of CCP's Hazardous Waste Treatment and Storage license;
- future requirements the Federal Clean Air Act's "NESHAPS: Final Standards for Hazardous Air Pollutants for Hazardous Waste Combustor Final Rule" which had yet to be published; and
- wastewater pretreatment requirements under the Clean Water Act.

In 1999, CCP decided that an Environmental Cooperative Agreement might help facilitate their waste minimization project and submitted a letter of intent. DNR formally accepted them into the program May 1999. CCP and DNR began the process of negotiating an agreement. The agreement was public noticed for public comment March 8, 2001 and a public meeting held March 22, 2001.

### **Agreement and Project Summary**

This Environmental Cooperative Agreement provides the structural framework for CCP and DNR to reprioritize and focus their resources to evaluate the feasibility and desirability of a waste minimization project to recover xylene from its reaction water. CCP will also evaluate other projects aimed at eliminating or significantly reducing the waste streams that are currently burned in its hazardous waste incinerator. They have committed to ensure that hazardous wastes and other constituents are reduced at their source whenever possible, or, when not possible, that they are recycled in an environmentally sound manner, preventing undesirable transfer of chemical releases from one media (air, water, land) to another.

Specifically CCP commits to cease burning hazardous waste in its incinerator by October 1, 2001. This is one year before it would be otherwise required to do so by EPA's HW Combustion MACT Regulation.<sup>a</sup>

The Environmental Cooperative Agreement does not replace or change the environmental regulations or the environmental permitting and approval process that CCP is required to go through for approval of its project(s). Technical staff in DNR's Waste, Air and Wastewater Pretreatment Programs are reviewing these project(s) using their normal regulatory review processes. CCP does benefit from the agreement by receiving a coordinated and expedited regulatory review of their project(s).

As of October 1, 2001 CCP is making two big changes. First, it is not going to fuel the incinerator with hazardous waste solvents. The solvents will be shipped offsite for reclamation and reused rather than burned. Second, CCP is making the reaction water non-hazardous by installing a Macro Porous Polymer – Extraction (MPPE) technology developed by Akzo Nobel Inc. This technology will remove the xylene and other solvents that make the wastewater an ignitable hazardous waste. CCP will also be neutralizing the reaction water using ammonium hydroxide so the reaction water is no longer an acid, and thus a corrosive hazardous waste.

For the immediate future CCP will continue to operate its "Non-hazardous Wastewater Incinerator" to manage glycol and other pollutants remaining in its reaction waters. During this time, CCP has committed to continue to operate the incinerator at the same temperatures and other operating conditions used when it was a licensed hazardous waste incinerator. The "Non-hazardous Wastewater Incinerator" will be regulated by both the DNR's Air Program and Wastewater Pretreatment Program. CCP will also prepare feasibility studies of waste minimization and management options for its



reaction water, glycol and waste solvents. When these studies are completed, CCP may propose an alternative approach to manage the remaining reaction water, glycol and waste solvents. Any change that CCP proposes will go through a full regulatory review of appropriate DNR Air, Wastewater and Waste Programs. The Agreement provides a clear timeline and regulatory path for CCP to implement their waste minimization project and make the transition from a facility that burns hazardous wastes to a facility that does not.

As part of this Agreement CCP also commits to establish an Environmental Management System, to establish a community advisory committee, to conduct ongoing dialogue with the community on environmental issues, to pursue other waste minimization and pollution prevention projects and to take a leadership role in product environmental stewardship.

### **Goals for CCP Saukville Facility**

As part of CCP's commitment to superior environmental performance CCP has set goals that are beyond the requirements of environmental regulations. The Agreement identifies specific objectives, activities and timelines that CCP and DNR have committed to directed at achieving the following CCP goals:

- A. Through waste minimization and pollution prevention, eliminate or significantly reduce the waste streams that are currently burned in its hazardous waste incinerator. Ensure that hazardous wastes and other constituents are reduced at their source whenever possible, or, when not possible, that they are recycled in an environmentally sound manner, preventing undesirable transfer of chemical releases from one media (air, water, land) to another.
- B. Establish a long-term reduction in the amount of wastes generated and contaminants and pollutants released giving priority to those pollutants, contaminants and wastes of highest health and environmental concern.
- C. Through implementation of CCP's Environmental Management System, continuously improve its practices to minimize environmental impacts, conserve natural resources and to work cooperatively with its neighbors, the local community and others in these efforts.
- D. Take leadership in product stewardship, integrating health, safety and environmental considerations into the design, development and improvement of products, including a commitment to conserve, where possible, natural resources and energy. In partnership with its customers CCP will strive to encourage continued environmental stewardship in the use and ultimate disposal of its products.

### **Variances that would be granted by the proposed action**

The Agreement does not grant any variances to environmental standards, emission limits, or pollution control requirements. Restated another way, it does not allow CCP to impact the environment in ways not currently allowed under state and federal rules and laws. CCP shall rely upon the operational flexibility and commitment to deadlines, coordination and communication by both DNR and US EPA to make this proposed project possible. As part of this Agreement, DNR agrees to coordinate its air,



water and hazardous waste reviews and commit to a timeline for coordinated review and decision-making.

## **Significant factual, legal, methodological, and policy questions considered by DNR**

Citizens expressed a number of questions and concerns when this Agreement was initially proposed during the March 2001 public comment period. DNR summarized these comments and DNR Air, Waste and Wastewater technical staff took considerable time to review and respond to the public concerns. CCP and DNR then jointly developed specific changes in the Agreement to clarify it and respond to some of the comments and citizen concerns. Other comments were out of the purview of the Agreement and staff in DNR's Air, Wastewater and Waste Programs have and will address them in their normal regulatory review of CCP's projects and facility. CCP will address other concerns as it works with its Community Advisory Committee in the development of CCP's Environmental Management System. CCP has indicated they are especially interested in working with the Community to address odor concerns. The "Summary of Public Comments and DNR Response on CCP Environmental Cooperative Agreement" is available on DNR's web or from the project coordinator.

In developing this agreement DNR initially considered several key questions. First, was there technology available that would give CCP new opportunities to reduce, reuse and recycle their hazardous wastes? CCP initially conducted feasibility and pilot studies of the new MPPE technology. The studies demonstrated that the system should be able to remove 99.9% of the xylene, the major constituent that made the reaction water hazardous. As part of this Agreement, CCP commits to conduct similar studies of waste minimization options for their cleaning and process solvent wastes as well as their glycol wastewater stream (a non-hazardous waste).

A second question DNR addressed was what regulatory requirements, approvals and permits modifications would CCP need to implement their waste minimization project? Was it possible within the regulatory review timelines and the agency's staffing constraints to provide a clear pathway for regulatory review of CCP's project? DNR staff from hazardous waste, air, pretreatment and remediation and redevelopment identified the requirements and approvals required for their programs and agreed to re-prioritize their workloads so that a coordinated and timely review of the CCP's waste minimization project could be made by DNR. A benefit was that both DNR and CCP staff could focus their limited time and resources on the waste minimization project. The DNR agreed to this re-prioritization under the condition that CCP had the transition completed by October 2001.

A third question DNR and CCP considered was how to best manage the glycol wastewater stream until the results of the waste minimization feasibility studies are complete. The choices were to discharge the non-hazardous, but high strength wastewater to the Saukville Wastewater Treatment Plant (WWTP) or to continue to use the existing incinerator as a non-hazardous wastewater incinerator. Since the Saukville WWTP has limited additional capability to treat high-strength waste (as measured by Chemical Oxygen Demand), the decision was to use the non-hazardous wastewater incinerator option. This system will be regulated both by DNR's wastewater pretreatment and by DNR's air management programs.



Finally DNR wanted to insure the continuation of corrective action cleanup at the facility. This cleanup is required as part of the facility's Hazardous Waste License. As part of this Agreement, CCP makes a legally binding commitment to continue to implement the corrective action measures and monitoring agreed to as part of the facility's plan of operation initially approved as part of its Hazardous Waste License.

## **Consistency with statutory obligations**

The Agreement is consistent with the statutory goals and requirements of the Environmental Cooperation Pilot Program, as specified in ss. 299.80(2) and (3), Wis. Stats. CCP has committed to implement an environmental management system that is based on the standards for environmental management systems issued by the International Organization for Standardization (ISO) or that has equivalent components. The company has expressed a commitment to superior environmental performance and to take a leadership role in product stewardship. The proposed Agreement includes measurable and verifiable goals for waste reduction, improved efficiency, and reduced use of natural resources. Pollution limits remain verifiable, enforceable, and at least as stringent as they otherwise would be. For example, the facility will continue to provide information to DNR on its emissions, discharges and waste generation for its incinerator and other operations under the reporting and permitting requirements of Wisconsin's Hazardous Waste, Clean Air, Clean Water and other environmental laws. CCP also continues to operate a separate thermal oxidizer that provides control of air emissions from CCP's other production and plant processes.

Under the terms of this Agreement, CCP will perform periodic audits and performance evaluations. The company will meet regularly with interested persons from the community surrounding the plant, and those stakeholders will be involved in meaningful ways in reviewing environmental performance and discussing issues. Finally, the company will report periodically to the DNR and interested persons group on the implementation of the Agreement and on the company's environmental performance.

The terms of this Agreement should lead to increased trust among CCP, the public, and DNR. The Agreement should reduce the amount of time spent by CCP and DNR on administrative tasks and permitting, and it will serve as a useful experiment and model that may help other companies improve their environmental performance.

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<sup>a</sup> *The federal Hazardous Waste Combustion MACT regulation has been under litigation. The dates and requirements of the MACT may change as a result of this litigation.*

## **For More information about the Agreement and Wisconsin's Environmental Cooperation Pilot Program**

Copies of this Cooperative Environmental Agreement, this factsheet, and a Summary of Comments Received on the Agreement and DNR Response, can be accessed via the Internet at:

**<http://www.dnr.state.wi.us/org/caer/cea/ecpp>**

or by contacting the CCP project manager, Lynn Persson, Wisconsin DNR, 101 S. Webster St., PO Box 7921, Madison, WI 53707-7921, Email: **[perssl@dnr.state.wi.us](mailto:perssl@dnr.state.wi.us)**, (608) 267-3763 or Fax (608) 267-0496.

For more information about the Environmental Cooperative Agreement Program contact Mark McDermid, Director, Bureau of Cooperative Environmental Assistance, Wisconsin DNR, Box 7921, Madison, WI 53705-7921. Phone (608)267-3125 or email **[mcderm@dnr.state.wi.us](mailto:mcderm@dnr.state.wi.us)** .

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*Reasonable request for the information in an alternate format will be provided to qualified individuals with disabilities. Call (608)267-9700 for more information.*