

WAUSAU PAPER CORP.
Form 11-K
June 29, 2006

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement No. 333-02845 on Form S-8 of our report dated June 15, 2006, appearing in this annual report on Form 11-K of the Wausau Paper Corp. Savings and Investment Plan for the year ended December 31, 2005.

DELOITTE & TOUCHE LLP

Milwaukee, Wisconsin

June 29, 2006