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The purpose of reviewing all processes relating to custodial and maintenance operations is to assess:

- Whether custodial and maintenance services are responding effectively and efficiently to maintaining an optimized learning environment for students;
- Whether the department has the appropriate organizational structure to effectively manage service delivery;
- Whether appropriate internal controls exist to effectively manage custodial and maintenance operations and expenditures;
- Opportunities to support continual improvement in the effectiveness and efficiency of all processes

The following table summarizes the leading practices defined for custodial and maintenance operations, and identifies where evidence was found to indicate that the practice was adopted in full. Where the evidence was not present or the practice was not completely adopted at the time of the review, a “No” indicates that an improvement opportunity exists.

### The Board’s Staffing Model/Allocation Supports the Cleaning Standards and Maintenance Requirements.

Leading Practices – Custodial and Maintenance Operations	Evidence of Adoption?
The board has adopted cleaning standards and has developed a standard set of processes and tools to monitor, manage, and report on results.	No
Management’s custodial/maintenance allocation model optimizes the use of staff.	Yes

### Development of Annual/Multi-Year Maintenance Plan

Leading Practices – Custodial and Maintenance Operations	Evidence of Adoption?
Using stakeholder input, management develops an annual and multi-year (three to five years) maintenance plan that addresses preventative and deferred maintenance priorities. Outcomes improve the learning environment for students. The plan optimizes the use of available funding (Annual Renewal Grant and Good Places to Learn funding) and is approved by the Board.	Yes

## Training to Support Skills Development and Safety

Leading Practices – Custodial and Maintenance Operations	Evidence of Adoption?
A monitored annual training plan for staff addresses ongoing skill development and emerging regulatory issues.	Yes

## Standardization of Cleaning and Maintenance Supplies

Leading Practices – Custodial and Maintenance Operations	Evidence of Adoption?
An inventory system tracks and controls major cleaning and maintenance equipment.	No
Common standards ensure efficient procurement of supplies to minimize costs and promote energy and operating efficiency.	Yes

## Project Management, Monitoring and Support Systems

Leading Practices – Custodial and Maintenance Operations	Evidence of Adoption?
A work-order system and process records, monitors, and evaluates projects ensuring the effective use of resources.	Yes
Management regularly evaluates the overall effectiveness and efficiency of its maintenance and custodial service practices.	Yes

## Staffing Model Supports the Board’s Cleaning and Maintenance Standards

The Board maintains a custodial manual entitled “Emploi détaillé du temps du concierge” (Detailed custodian schedule), which includes task descriptions for technicians and custodians. However, these guidelines are not written cleaning standards that the school board could use to evaluate the performance of custodial staff at each facility. School cleanliness is currently reviewed on a reactive basis when incidents are reported by the principals. One of the department’s goals identified in the 2008-09 annual improvement plan is to reduce the number of complaints regarding cleanliness. At the time of this review, the custodial department was implementing a review committee, composed of custodial staff and principals, in order to identify solutions to custodial problems.

The Board’s custodial allocation model provides for the optimal use of resources. The allocation model being used by the school board stems from a comparative study with five other school boards in 2007. The allocation model is composed of two formulae, one based on the number of students (the number of students as indicated in the

October report divided by 140) and another based on square footage (the adjusted school square footage divided by 19,000 for an elementary school, or the adjusted school square footage divided by 24,000 for a high school). According to the allocation model, the formula with the highest score determines the number of custodial hours.

### **Development of Annual and Multi-Year Maintenance Plan**

The capital department manager develops an annual maintenance plan that addresses its preventative, critical and deferred maintenance, in accordance with the Board's standards. The Board's maintenance and renewal activities are re-assessed annually through individual school assessment. Priorities are then incorporated into the annual plan. This helps ensure that schools are maintained in the best condition possible to support improved student learning and facilitate employee productivity.

Management uses the ReCAPP database as one of its primary sources in developing the annual major maintenance and renewal priorities for the coming year. This has been supported by the Ministry's Good Places to Learn funding, enabling the Board to carry out critical renewal work on its schools. At the time of the operational review, a five-year maintenance plan had just been developed according to the ReCAPP database.

### **Training to Support Skills Development and Safety**

The Board has established a training program to provide ongoing skills development to maintenance and custodial staff, and to address emerging regulatory issues. Training needs are identified through a joint committee with union and Board representation. The custodial and maintenance department manager and the person responsible for occupational health and safety are also part of the committee.

The department has scheduled annual professional development, health and safety days for custodians, maintenance staff and supervisors. Safety training is provided on WHMIS, working alone, safe lifting, and clean sweep. Training sessions on subjects such as asbestos, propane tank transportation or waterless urinal maintenance and cleaning are also scheduled. The department also intends to schedule training on electrical safety awareness.

As part of the "on-boarding" process, new custodians/maintenance employees are paired with an experienced employee for two weeks. The department has developed an orientation package for new hires that includes information on safe work practices.

### **Standardization of Cleaning and Maintenance Supplies**

The school board participates in a purchasing consortium with another school board for over one hundred cleaning and maintenance products. Suppliers are invited to bid every two years.

The school board does not currently have an inventory of cleaning and maintenance supplies by school. The custodial and maintenance department plans to develop an Excel monitoring template, which will contain data on the use of maintenance products by school. The department also intends to maintain an inventory of custodial equipment at each school, and develop a replacement schedule according to the life cycles of supplies, in order to replace equipment such as lawnmowers and snowblowers.

The custodial and maintenance department contributes to maintaining a minimal level of supplies, using a centralized inventory in a warehouse shared with the Sudbury Catholic District School Board. Custodians complete hard copy order forms, which are then approved by the custodial manager. Cleaning and maintenance supplies are then distributed to schools on Tuesdays and Thursdays. As a next step, the school board could consider computerizing the process for creating order forms for cleaning and maintenance supplies.

Some custodians and tradespeople have credit cards for unexpected expenditures.

### **Project Management, Monitoring and Support Systems**

The facilities management function is supported by “School Dude,” an electronic system that tracks work orders. 30% of the time, maintenance and repair work orders are completed by principals or custodians directly into School Dude. Work orders are reviewed on a daily basis by the administration. Each work order is also reviewed and prioritized by the person in charge of maintenance. It is then assigned to internal staff or to external contractors depending on the urgency of the repair, health and safety factors, and the availability of the required tradespeople. Approved work orders given to contractors are also assigned a purchase order in the school board’s financial systems (BAS). As a next step, the school board could consider developing an interface between School Dude and BAS, in order to make the work order management process more efficient. The school board could also consider using work orders to track labour and to compare work hours against estimated work hours as well as actual costs against estimated costs.

### **Assessment of the Board’s Service Delivery Model**

Custodial services are provided by school board employees. The school board uses a combination of internal staff and external contractors to deliver maintenance services.

Absence rates for custodial and maintenance staff are less than 2%. Close union relationships, a well integrated, progressive return-to-work-program and an ongoing employee recognition program have contributed to the school board’s positive results in this area.

The school board regularly evaluates the overall effectiveness and efficiency of its maintenance and custodial services, in particular by means of a department improvement plan developed by the manager of the custodial and maintenance department.

As a next step, the school board could consider periodically assessing custodial staff as it currently does for other non-academic staff. The school board could also consider periodic meetings between custodial and management staff and principals in order to ensure the assessment and continual improvement of the Board's custodial and maintenance department.

### **Recommendations:**

- The custodial and maintenance department should establish cleaning standards in all its schools to ensure consistent levels of service and monitoring at all sites. Once the standards are established, management should ensure that results are monitored, measured and reported annually.
- The custodial and maintenance department should proceed with its plan to implement an inventory system that will enable it to track and control major cleaning and maintenance equipment.

## **5.3 Energy Management**

The purpose of reviewing all related energy management processes is to assess:

- Whether adequate planning and communication exist to support the reduction of energy consumption;
- Whether school board structure and processes are in place to ensure that energy is procured for the lowest cost;
- Identify opportunities to support continual improvement in the effectiveness and efficiency of all processes.

The following table summarizes the leading practices defined for energy management, and identifies where evidence was found to indicate that the practice was adopted in full. Where the evidence was not present or the practice was not completely adopted at the time of the review, a “No” indicates that an improvement opportunity exists.

## Energy Management Plan

Leading Practices – Energy Management	Evidence of Adoption?
Management has established a multi-year energy management plan that incorporates measures to be implemented and the tools to monitor and manage the plan.	No
Purchasing practices support energy conservation objectives (e.g., Energy Star products, leveraging consortia membership).	Yes
Successful conservation initiatives are shared across all schools and with other school boards.	Yes

## Tracking and Reporting Energy Conservation

Leading Practices – Energy Management	Evidence of Adoption?
Management provides formal annual reporting on the conservation savings achieved against plan.	No
A comprehensive system exists to budget expenditures, track consumption, and identify opportunities for further savings.	Yes
Billing for all board facilities is consolidated from each utility	No
Centralized technology that automates energy regulation and conservation (e.g., light control, desktop power) is used wherever practical.	Yes

## Energy Management Plan

The Board uses a an energy management strategy that focuses on replacing aging building components and purchasing new systems (energy-saving ventilation systems, programmable thermostats and controls, computerized controls and high efficiency boilers that can yield the most significant energy savings). Infrastructure and equipment replacement projects are normally prioritized according to the return on investment and expected cost savings.

A presentation on “green” schools, highlighting the Board’s energy conservation accomplishments in the past 10 years or so, was shared with the board of trustees in June 2008. This presentation highlighted the Board’s efforts in implementing a “green” culture in all its facilities, with a focus on increasing efficiency in energy consumption (energy, water, supplies) and reducing environmental and human health impacts. The Conseil scolaire de district du Nouvel-Ontario has six green schools that were built after 2003. The presentation for the trustees identified the creation of an environment

committee that will set the outcomes to be achieved and develop an action plan as the Board's next step with regard to energy conservation.

The Board participates in a purchasing consortium for its natural gas and electricity needs. The Board's purchasing guidelines do not require that new equipment be energy efficient (e.g., Energy Star products). In practice, the custodial and maintenance department still considers energy efficiency when purchasing or accepting donations of supplies. As a next step, the Board should review its guidelines to ensure that energy efficient goods and services are purchased systemwide, either directly or through subcontractors.

The custodial and maintenance department organized the following energy conservation activities to train or heighten awareness among staff:

- Classes on programming computerized controls and programmable thermostats;
- Training on high efficiency heaters;
- Participation in the "Action Conservation" program;
- Participation in energy-conservation workshops, such as the "Spot the Energy Saving" workshop given by the Catholic School Board Services Association or the "Energy conference" workshop held during the Operation Maintenance & Construction (OMC) annual conference.

The Board also attends Ontario Association of Business Officials (OASBO) meetings on energy management.

### **Tracking and Reporting Energy Conservation**

The energy management portfolio is administered by the manager of the custodial and maintenance department, who acts as the Board's energy conservation advocate by proposing and implementing various energy conservation initiatives.

Management developed an internal Excel tool to track energy consumption and to quantify energy conservation results. This tool is used to input data on temperatures and energy consumption by school every three months and it provides a comparative analysis of consumption in all schools (in kWh, in cubic metre and in dollar values). The data are not presented in periodic reports on energy conservation intended for the executive committee or board of trustees. Currently, energy consumption data for each school are not shared with school principals. These data have not been recently shared with other school boards in order to exchange best practices. As a next step, the Board should communicate effective conservation initiatives and the Board's progress in energy management to schools on a regular basis.



The Board does not have consolidated billing for its various sites and facilities. Utility bills from different schools are manually consolidated using an Excel tool and analyzed by the manager of the custodial and maintenance department.

Computerized control systems that automate energy regulation and conservation are used in 13 Board buildings.

Since 2003, the Board has built only green schools, whose energy performance surpasses the model energy code for buildings.

### **Recommendations:**

- The school board should develop a comprehensive multi-year energy management plan that includes consumption reduction goals, key activities, timelines for completion, success indicators and assigned responsibilities to complement the school board's energy conservation strategy.
- Once the Board has created its multi-year energy management plan, the custodial and maintenance department should officially provide formal annual reporting on the conservation savings achieved against the plan.
- The custodial and maintenance department should ask the utility companies to provide consolidated billing in an electronic format. This would support more efficient monitoring and forecasting of energy consumption by eliminating the need to manually consolidate billing, as well as reducing the workload of the accounts payable department. Given the geographical area covered by the school board, the Board will likely not be able to consolidate utility billing across all sites. However, management is encouraged to explore opportunities to consolidate utility billing in urban centres such as Sudbury, to increase energy efficiency.

## **5.4 Health, Safety and Security**

The purpose of reviewing all the Health, Safety and Security processes is to assess:

- Whether adequate planning and communication exist to support the provision of a safe teaching and learning environment;
- Whether school board structure and processes are in place to implement safety precautions;
- Opportunities to support continual improvement in the effectiveness and efficiency of all processes

The following table summarizes the leading practices defined for health, safety and security, and identifies where evidence was found to indicate that the practice was adopted in full. Where the evidence was not present or the practice was not completely adopted at the time of the review, a “No” indicates that an improvement opportunity exists.

### **Development, Monitoring, and Tracking of Policies and Plans for Health, Safety and Security**

<b>Leading Practices – Health, Safety and Security</b>	<b>Evidence of Adoption?</b>
The maintenance of health, safety and security policies and the development of appropriate plans ensure compliance with statutory health, safety and security requirements.	Yes
The security code policy includes alert codes that reflect the situation and threat level, and identify departmental responsibilities.	Yes
Security incidents are tracked by type of incident (e.g., property damage, intrusion, etc.).	Yes
Operations management follows Ministry guidelines, policy and legislation on healthy schools.	Yes
Safe school teams responsible for school safety (e.g., PPM 144) are implemented in every school.	Yes
Water and air quality standards are monitored and issues are reported for corrective action.	Yes

### **Development, Monitoring and Tracking of Policies and Plans for Health, Safety and Security**

The health, safety and security portfolio is led by the person responsible for health and safety records, who reports to the HR Manager, and by the manager of the maintenance department, who in turns reports to the Superintendent of Finance and Business Services.

The Board recognizes the importance of health and safety issues and has adopted safety, security and environment guidelines. These guidelines are complemented by administrative directives and procedures. In 2002, management implemented an occupational health and safety joint committee, comprised of 21 individuals of whom 12 are employee representatives and 9 are administrators. The committee convenes four times a year to discuss actionable measures, to analyze accident causes, to discuss future training sessions and to respond to questions from employees. The guidelines are not subject to a documented systematic review cycle, but a review of the material demonstrates that the health and safety committee is focused on maintaining and updating documents in order to keep them current and applicable.

The occupational health and safety joint committee (OHSSJC) implemented six subcommittees to study specific issues in-depth and make recommendations to the employer in the following safety areas:

1. Review of accident statistics;
2. Elevated work;
3. Violence prevention and working alone;
4. Odour-free site;
5. First aid training;
6. Technology workshops and science laboratories.

In 2003, the Board implemented an accessibility working group whose mission is to research possible barriers for persons with disabilities in buildings, policies, regulations, programs, methods and departments throughout the Conseil scolaire catholique du Nouvel-Ontario. The working group developed a 20-year action plan in order to make all schools accessible to persons with disabilities. With the exception of the 2008-09 school year, the accessibility plan is re-evaluated periodically according to identified barriers and conversion needs for the year.

The Board prepared an emergency procedures guide that will be distributed in 2009. The guide will serve as a decision-making tool that will reduce response time and risks for students and staff by defining roles and responsibilities. Currently, the responsibilities of students and parents in emergencies are communicated through the student dayplanner, which includes a section on emergency procedures in the initial pages. The Board has developed a partnership with the public health department. The Board has recently carried out threat simulations, including one for violent acts in several schools (Elliot Lake, Espanola), and expects to modify certain guidelines, including the one on emergency evacuation drills.

The Board has a reporting protocol for safety incidents. The person responsible for health and safety records in the HR department and the manager of the maintenance department developed an “orange kit” with instructions on what to do in case of an occupational accident, as well as information and forms to be filled out by the employee, his or her supervisor and the doctor. The Board will also use the accident analysis system (Parklane) to computerize and simplify the management and tracking of incidents and accidents.

The Board recently revised its school safety and security guidelines. At time of the review, the superintendents were in the process of meeting principals of the different

levels to communicate additions and changes. The Board’s guidelines highlight the responsibility of schools for student safety, but they do not formally require the presence of a safe school team in each school.

To promote health among all students, the Superintendent of Finance and Business Services, in collaboration with a committee, developed nutritional guidelines. In effect as of September 25, 2007, these guidelines outline the responsibilities of principals, students, parents, staff and the Board with regard to student nutrition.

The manager and four staff members of the custodial department are certified as “trained persons” under Ontario Regulation 170/03, which regulates the drinking water treatment systems in two schools. In compliance with Ontario

Regulation 170/03 on lead in water and samples, trained staff members take water samples from May 15 to September 15 in each school and daycare. The samples are analyzed by an external laboratory, and the results are communicated to the Ministry in the event of a problem. When lead is detected in water, a monthly report is sent to the executive committee until the situation is resolved.

### **Recommendation:**

There are no recommendations for this section.

## **5.5 Capital Plans, Policies and Procedures**

The purpose of reviewing capital plans, policies and procedures is to:

- Assess whether school capital assets are being utilized effectively and efficiently;
- Assess how well management is planning for future capital requirements, based on enrolment forecasts and the capacity/maintenance issues of the existing asset base, relative to the funding available from the Ministry (i.e. NPP funding);
- Assess whether management is appropriately prioritizing the maintenance and renewal expenditures in light of the available Ministry funding and multiyear capital programs;
- Identify appropriate controls and transparency within the current planning process;
- Identify opportunities to support continual improvement in the effectiveness and efficiency of all processes.

The following table summarizes the leading practices defined for capital plans, policies and procedures, and identifies where evidence was found to indicate that the practice

was adopted in full. Where the evidence was not present or the practice was not completely adopted at the time of the review, a “No” indicates that an improvement opportunity exists.

### Development of Annual and Multi-Year Capital Plans

Leading Practices – Capital Plans, Policies and Procedures	Evidence of Adoption?
The school board has an approved annual and multi-year capital program that includes the related funding plan.	Yes
The school board has an approved pupil accommodation review policy.	No

### On-going Monitoring and Maintenance of Data to Support Capital Planning

Leading Practices – Capital Plans, Policies and Procedures	Evidence of Adoption?
The school board maintains accurate and up-to-date inventories of school capacity and utilization	Yes
Capital forecasts and related funding plans are assessed annually and adjusted to meet current needs and changes to original assumptions such as enrolment projections and capital grants.	Yes
Accuracy of capital forecasts and related funding plans is reevaluated every year to meet current needs and changes to original assumptions such as enrolment projections.	Yes
An accurate and current assessment of facility conditions is maintained, based on industry standards (using RECAPP methodology).	Yes

### Development of Annual and Multi-Year Capital Plans

The Board submitted its 10-year capital plan to the Ministry; this report was prepared using data from the ReCAPP and SFIS databases and in collaboration with external consultants.

The capital department has a five-year plan for facilities renewal, complete with cost estimates. School renewal projects are based on a multi-year analysis of data from the ReCAPP database, experience within the cluster of schools and comments from custodial and maintenance supervisors. The five-year plan is reviewed annually using an annual update of the ReCAPP database. The Board actively coordinates renewal projects using the capital plan (i.e., prohibitive to repair (PTR) schools, Good Places to Learn funding and primary class size funding) to save substantially throughout the process. Area studies on capital investments allowed the Board to detect opportunities

to consolidate schools in the same region. After a public consultation and the implementation of a review committee, the Board consolidated several schools with overall community support.

The Board does not have an approved pupil accommodation review policy. Given that the Board does not expect to close any schools, it does not intend to ask trustees to approve the Pupil Accommodation Review Guidelines.

The Board is currently expanding and expects to proceed with the construction of three schools. At the time of the operational review, three construction projects totalling approximately \$20 million were awaiting Ministry funding approval. In its 2008-09 capital plan, the Board noted that it has no capital reserve in place to subsidize the costs of these projects.

Management periodically updates the trustees on the status of all capital projects.

### **Ongoing Monitoring and Maintenance of Data to Support Capital Planning**

The monitoring and planning of school capacity is reported within the framework of the Student Facilities Inventory System (SFIS). The school board maintains accurate and up-to-date inventories of school capacity and utilization. SFIS financial data are reviewed semi-annually. Facilities services staff currently use ReCAPP as a tracking tool for projects funded by the Renewal Grant and Good Places to Learn funding.

#### **Recommendation:**

- The school board should request that trustees approve a pupil accommodation review policy in order to effectively manage future school closings.

## **5.6 Construction Management**

The purpose of reviewing all related construction management processes is to assess and identify:

- Whether processes are in place to ensure that school boards complete construction projects on-time, on-budget and with due regard to economy;
- Opportunities to support continual improvement in the effectiveness and efficiency of all processes.

The following table summarizes the leading practices defined for construction management, and identifies where evidence was found to indicate that the practice was adopted in full. Where the evidence was not present or the practice was not completely adopted at the time of the review, a “No” indicates that an improvement opportunity exists.

### Cost Effective Practices in the Design and Construction of Facilities

Leading Practices – Construction Management	Evidence of Adoption?
Management uses cost-effective designs, standard footprints, energy conservation and economical construction practices to minimize construction, maintenance and operation costs.	Yes
Management maintains standard policy and procedures to rationalize construction projects, including benchmarking against other school board construction costs and design standards (including coterminous boards).	Yes

### Monitoring and Reporting on Progress of Construction Projects

Leading Practices – Construction Management	Evidence of Adoption?
An effective management process monitors and controls construction projects and their costs. This includes periodic project status updates and post-construction project evaluation.	Yes

### Maintaining Current Approved Professional Service Providers

Leading Practices – Construction Management	Evidence of Adoption?
Management evaluates and updates the approved list of contractors, architects, and related professionals periodically, ideally in 5-year cycles).	No

### Cost-Effective Practices in the Design and Construction of Facilities

The school board has developed new construction guidelines that include a guideline for architectural services outlining the architect selection process and the evaluation process for construction projects.

Management uses cost-effective designs, energy conservation and economical construction practices to minimize construction, maintenance and operation costs. For each project, the capital department manager requests a proposal for alternative materials in addition to a proposal for the selected materials before the project begins. This ensures more flexibility later in the project in case there are extra funds or budget cuts.

The school board has not established construction standards such as standard footprints. However, the Board has set standards for building content for each project and has presented them to the trustees.

## **Monitoring and Reporting of Progress on Construction Projects**

Construction projects are tracked internally in terms of their budget, quality and schedule. To manage ongoing construction projects and sites, the school board relies on external architects and internal project coordinators who are responsible for attending all worksite meetings and negotiating future changes. All changes must be approved by the capital department manager. This ensures the centralization of data that have an impact on the budget. This procedure and other project management procedures carried out by the internal coordinators are documented; they were reviewed in January 2009.

Onsite, the primary tool used to track construction projects is the schedule submitted by the contractor to the project coordinator every two weeks. In general, projects are completed within budget requirements due to the ongoing monitoring by project coordinators and the involvement of the capital department manager onsite. The trustees periodically receive reports on construction work.

## **Maintaining Current Approved Professional Service Providers**

With the exception of the supplier list in its finance system's procurement module, the school board does not have a formal, approved list of professional service providers. In practice, the school board maintains close relationships with professional service providers. This is due to the small number of professionals who can work in French.

### **Recommendation:**

- The school board should consider establishing an approved list of professional service providers subject to periodic review.





















No.	Recommendation
32.	The school board should consider establishing an approved list of professional service providers subject to periodic review.