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I-Introduction

Competitiveness, however defined, is increasingly a matter of insuring that national governments and their constitutive units provide a coherent, predictable, and transparent framework to facilitate the investment and management processes of firms considering new location, product, or market strategies in a particular national territory. In this sense, the regulatory framework, writ large, is a critical factor and precondition to attracting and retaining highly mobile capital assets in a globalized economy. The authorization, permit, and licensing process for new investments in plants, equipment, and new technologies by already existing enterprises is a key issue.

In the North American context, because of the federal nature of the governmental structures of the United States, Canada, and Mexico this regulatory process is not as streamlined, is more fragmented, with overlapping and concurrent jurisdictions among levels of government (local, state and national), thereby making permitting a process at once more complex and less stringent. It has also led, to some extent, to what observers have called regulatory competition among the subnational units, a phenomenon less common in Europe at the country level but perhaps more evident among member states of the European Union.

The highly competitive global economy has yielded a twin set of concerns from which governments cannot be held exempt: a search for excellence and quality, grounded in performance measures, in all organizations' value chain and the development of the concept of best practices and comparative benchmarks. This latter concept makes possible ready comparisons of firms and governmental authorities' performance across boundaries. It further facilitates corporate decision making in matters of location, expansion, and strategies.

This study, part of a larger commissioned project for the European Union, focuses on two representative subnational units in each of the two most advanced industrialized countries of North America: the State of Georgia, located in the high economic growth Southern region of the United States, and the Province of Quebec, in the manufacturing-intensive part of Eastern Canada. Each of these two subnational areas has developed dynamic industrial clusters and has been a magnet for foreign investment, entrepreneurial activity, and techno-innovation. They are therefore excellent cases illustrating the complex dynamics of licensing, permitting and authorizing in the U.S. and Canada for small and medium-sized firms.

II- Scope of Work

This study focuses on one U.S. State and one Canadian Province as representative models of the industrial permitting process in North America. It follows closely the terms of reference included in the European Union benchmarking project . The outline of this report conforms to the specifications of the project manager as indicated in the project website.

First, a critical survey of the legislative and regulatory frameworks, applicable, to industrial permitting and licensing, was completed for each national jurisdiction. This was accomplished through a review of relevant legislative texts, relevant law books, compilations and websites and the use of overview legal articles. Further buttressing this work were a number of interviews conducted with legal experts (government agencies' contacts, private attorneys, law professors, consultants, and specialized staffs in the legislative branches of the two subnational jurisdictions.)

Second, the case studies were completed through a process of detailed interviewing of both key decision makers in targeted firms and officials from the public authorities involved directly or indirectly with permits or license issuances, depending on the case. This "mirror" approach required the identification of company and public authority interviewees cognizant with the details of the case and still employed in the same organization. To the extent possible, we sought to interview only individuals personally involved in the licensing/permitting process.

The cases were identified with the assistance of state and provincial authorities. Ultimate selection of the cases rested solely with the researchers in consultation with the study contractor. Permission was secured from all interviewees prior to conducting interviews. Confidentiality was guaranteed. Most typically, two private sector and two matching public authority interviews were conducted, in most cases with the same individuals. The main interviews averaged 50 minutes in length. The followup interview ranged from 20 to 30 minutes. A team of three interviewers were involved and for the private sector interviews two interviewers were involved through the use of a speaker phone.

Results of the twenty in-depth private sector and matching public authorities interviews are detailed in Appendices A, B, C, and D, following the body of this report. Appendices A (Province of Quebec) and C (State of Georgia) each present a set of five "fiches" sequentially numbered by case (one through five). The fiches provide background information and seek to answer the input, output, and process benchmark questions as well as best practices issues case by case. As such, these two appendices are analytical and seek, to the extent possible, some quantification applicable to the specific case or the underlying licensing/permitting process addressed. Appendices B (Province of Quebec) and D (State of Georgia) are summaries of actual interviews organized according to the numbered questions of the "Manual for Intensive Interviews" (1 through 11). Appendices B and D are more descriptive and, on occasion, go beyond the scope of the Manual's question. On occasion, the information is unavailable.

Third, the permitting performance for the sample of Quebec and Georgia cases is next reviewed according to input, output, and process benchmarks. Fourth, best performance practices are identified and reviewed. Lastly, conclusions and recommendations are drawn.

III- Legislative and Regulatory Framework for Permitting

III.1-The Legal Framework in Québec:

III.1.1- Contrast and Comparison of Industrial Permitting in Canadian Federalism.

Québec is a member province of a federation in which governmental jurisdiction. It is split among the federal government, provincial and the territorial levels of government. Canada is a federal State that brings together a number of different political communities with a common government for common purposes and separate "state" or "provincial" or "cantonal" governments for the particular purposes of each community. In Canada, the British North America (BNA) Act was the instrument that brought the federation, the new nation, into existence. It was an act of the British Parliament. Under the terms of the Canada Act, the Constitution Act, 1982, was proclaimed in Canada and "patriation" was achieved.

The Canadian federation now comprises 10 provinces and two northern territories. In matters relevant to this report, the federal government is directly responsible for forty percent of the land area of Canada, including most of the Yukon and the Northwest Territories, and it manages the largest system of national parks in the world. Among the federal functions, there are the federal-provincial financial arrangements, federally subsidized programs, and more general tax (and tax relief) provisions; employment policy; energy and natural resource policies; and, of major importance, the income security programs. These can be more significant for urban and regional planning than any of the more obvious instruments.

One of the most critical issues of federalism is that of coordinating a multiplicity of different policies, administered with different objectives, and by different departments. It has been frequently argued, in the Canadian constitutional debate, that if the disparate policies could be explicitly administered to achieve common land objectives, much could be avoided or mitigated. Many of the powers of the federal government are operated in cooperation, or in conjunction with the provinces. This may be for political and administrative reasons, or it may be because of shared, or unclear, constitutional responsibility.

Environmental management is an example of an unclear constitutional responsibility. When the basic division of powers was accomplished in 1867 no one foresaw that environmental management would become a concern. Consequently, the categories of powers that are assigned to the two levels of government bear no relationship to the actual needs of environmental managers. It is usually not possible, therefore, to say that major environmental management tasks fall either to the Dominion or the provinces. The powers that may be used to combat environmental degradation are liberally sprinkled through the heads of power given to each level of government. Jurisdiction over water is another case where the constitutional is unclear.

The provisions of the BNA Act are capable of variable interpretation and, in any event, there are the residual powers which give the federal government responsibility for any functions which have not been specifically delegated to the provinces. This is the reverse of the position under the US constitution where residual powers are vested in the States. The previous examples show that it is clear that federal and provincial

responsabilities and fields of activity can not be neatly separated. Federal and provincial governments coexist. At one and the same time they have an autonomous and interdependent character: they operate in a mutually dependent political relationship.

Provincial-municipal relationships, on the other hand, are very different. The provinces not only determine what powers municipalities shall have: they are responsible for their actual existence. Reference is frequently made to the fact that municipalities are creations, or even creatures of the provinces. This does not mean, however, that they are tame pets: they have some political substances. Municipal governments - cities, towns, villages, counties, districts, and metropolitan regions - are set up by the provincial legislatures, and have such powers as the legislatures see fit to grant them. Mayors, reeves, and councilors are elected on a basis, which the provincial legislature prescribes. There are now close to 5,000 municipal governments in the country. They provide their communities with such services as water supply, sewage and garbage disposal, roads, sidewalks, street lighting, building codes, parks, playgrounds, libraries and so forth. Schools are generally looked after by school boards or commissions elected under provincial education acts. Viewing the intra-provincial scene as a whole, the provincial role in urban and regional planning has three dimensions, one involving federal relationships, one involving municipal relationships, and a third in which it operates independently. Environmental policies discussed earlier fall into the first category. The elaboration of provincial planning policies to be operated by municipalities and the control of this operation falls into the second.

Québec has considerable autonomy within Canadian federalism, enabling it to express its difference and develop in many areas. Within Canadian federalism, Quebec has more advantages than the other Provinces. When establishing a business or investing in Québec, it is important to take into account the laws of the federal government and the province. The legal system is based on civil laws in Québec. Every effort is usually made to avoid duplication between federal and provincial governments. In the case of rules governing electrical safety standards, for example, each province has adopted the Canadian Standards Association's guidelines in its regulations as well as its certification services.

We will review hereunder the most salient features of industrial permitting process in the Province of Québec.

III.1.2- Zoning and Use of Land

The development of land for commercial, industrial, residential, public, recreational or cultural uses is regulated at two levels. Typically, land development is regulated provincially and, in many instances, administered by local municipalities (see above for more information concerning the role of municipalities). All land developers are required to follow guidelines set out in an official municipal zoning plan, a document that contains the objectives and policies for the physical development of land in the affected municipality. The plan, initially prepared by the municipality but approved at the provincial level, considers all relevant social, economic and environmental matters pertaining to land development. It also includes regulatory devices for land division such as by-laws and system controls.

Zoning by-laws regulate the type of construction, height, bulk, location, size, floor area, spacing, character and use of buildings or structures that can be built in that area, as well as the population density of development. For example, there are residential sectors where it is forbidden to open commercial establishments. As the case of the Urban Community of Montreal--representing 28 municipalities--illustrates, municipal by-laws specifically define the wastewater disposal into sewer systems and waterways, the treatment of industrial wastewater, the air purification requirements inside the workplace. Prior to enacting a municipal zoning by-law, at least one public meeting must be held. Additionally, land developers must consider whether the area has been designated for community improvement projects, site plan control, and demolition control. In all such cases, a developer must seek approval from the Municipality. In addition, any company needing a construction permit should contact "la Régie du Bâtiment du Québec", which also establishes appropriate construction standards (more on this below).

III.1.3- A Canadian Attempt at Developing National Building Codes Applied at the Provincial and Municipal Permitting Levels

Under the British North America Act and its successor, the Constitution Act, responsibility for building regulation and construction permitting in Canada rests with the Provinces and Territories. In the past, this responsibility was generally delegated to municipalities. Not surprisingly, a multiplicity of regulations developed as each municipality tried to deal with its own needs. These variations from one municipality to the next made it very difficult for designers, product manufacturers, and contractors to conduct business in more than one region. Thus, in 1937, the Canadian Department of Finance asked the National Research Council (NRC) Canada to develop a model building regulation that could be adopted by all municipalities in Canada. The result of that initiative was the publication of the first edition of the National Building Code of Canada in 1941. The post-war construction boom resulted in demand for a revised NBC.

The National Building Code of Canada (NBC) provides minimum requirements for health, life safety and structural sufficiency in new buildings. The National Fire Code of Canada (NFC) provides minimum fire safety requirements for buildings, structures and areas where hazardous materials are used, and ensures an acceptable level of fire protection and fire prevention in the ongoing operation of buildings. The National Plumbing Code covers the design and installation of plumbing systems in buildings.

These Codes are model documents only and must be adopted by an authority having jurisdiction in order to come into effect. The national model codes are either adopted unchanged as the regulations of a province, territory or municipality or, in some cases, altered to suit local needs.

Building codes in Canada are generally concerned with fire safety, structural sufficiency and health. They apply to the construction of new buildings and to the demolition or relocation of existing ones. They also apply when the use of a building changes or when it is significantly renovated or altered. Fire codes generally apply to buildings already in use and regulate activities that cause fire hazards: they require the maintenance of fire safety equipment and egress facilities, and cover the combustibility of furnishings. Fire and building codes in Canada are usually developed cooperatively, to ensure compatibility. Unlike building codes, however, fire codes may contain retroactive

requirements, which apply to all buildings, regardless of when they were built. The enforcing authority must exercise judgment in the application of such requirements.

In the past, the building industry was predominantly concerned with new construction. With a very strong movement toward the renovation of the existing building stock, regulation is now needed for such projects to ensure public safety. The NBC is most likely to be applied to an existing building when an owner decides to renovate, to change its use or to build an addition; sometimes an enforcement authority decrees that buildings must be altered for reasons of public safety. The benefits derived from code compliance in renovation are the same as in new buildings. However, the increased cost of implementing in an existing building a design solution intended for a new building may be prohibitive. The planned publication in 2001 of objective-based codes will greatly assist code users in applying innovative solutions to new and existing buildings.

III.1.4- Environmental Permit Considerations

Concern for the environment continues to grow in Canada. In response, governments are regulating the disposal, generation and storage of waste materials, and establishing limits on emission or discharge of contaminants into the environment.

At a federal level, the Canadian Environmental Protection Act (CEPA) deals with the issues relating to environment. CEPA was passed in 1988. It covers pollution prevention, managing toxic substances, clean air and water controlling pollution and wastes, public participation (including right-to-sue for damage), environmental matters related to emergencies, biotechnology, federal government operations and federal and aboriginal lands, enforcement, information gathering, objectives, guidelines, and codes of practice. CEPA recognizes that provincial governments play a key role in environmental protection in Canada. Provincial representatives will provide advice to the federal Minister through the National Advisory Committee.

CEPA also requires consultation between provincial governments so that actions are taken in an effective and coordinated manner. CEPA includes provisions for agreements, which are cooperative arrangements that can cover activities such as inspections, investigation, and gathering of monitoring information. In addition, CEPA regulations do not apply in provinces that have a similar regulation when an equivalency agreement has been signed. This is intended to prevent duplication of efforts. As well, the Department of the Environment Act provides for cooperative agreements for the implementation of environmental protection measures and national approaches by federal, provincial, and territorial governments.

In Québec, a complete legislative framework concerning environmental issues exists. This legislation applies everywhere in Québec and CEPA is not as relevant in Québec as in the other Provinces. Among other laws and regulations, the “Loi sur la Qualité de l’Environnement” (law on the quality of environment) protects the quality of environment, promotes a better quality of the environment and prevents any pollution.

According to Article 22 of the “Loi sur la Qualité de l’Environnement”, any company starting a new business or expanding an existing one, has to get prior authorizations from the Provincial Ministry of Environment (« Ministère de l’Environnement et de la Faune »). The mission of the “Ministère de l'Environnement et de la Faune” is to ensure, with a view to sustainable development, the protection of the

environment and the conservation and development of wildlife and wildlife habitats. The Ministère's field operations are carried out mostly by the Direction Générale des Opérations (Operations Executive Branch) composed of 17 regional offices located in Québec's 17 administrative regions. The "Direction Générale des Opérations" (Operations Executive Branch) ensures the application of most of the policies, programs, acts and regulations developed by the Ministère's sector units. Also, as they work closely with Ministry clients and key environment and wildlife players, the regional offices determine if the legislation meets their needs.

It must be noted that for the Urban Community of Montreal (28 municipalities) a jurisdictional exception exists. The Provincial Minister for Environment has delegated Ministerial powers over air and water environmental permitting to the Urban Community of Montreal. Therefore, implementation power does not reside in a regional office of the Ministry. This exception gives the Montreal metropolitan area more latitude in matters of environmental permits (excluding toxic substances), though the Urban Community's actions are reviewable by the Ministry and must comply with all provincial rules and statutes.

In addition, the regional offices have the following responsibilities in the industrial matters. They issue authorizations certificate and licenses to promoters or businesses planning to implement a project liable to affect or change environment quality. They also provide the necessary assistance to players in the region in connection, especially, with industrial discharge, waste and effluent, hazardous material, biomedical waste, ozone-depleting substances, contaminated sites, and stone and sand quarries; They see to the enforcement of and compliance with the regulations and guidelines concerning industrial activities, especially the regulations respecting:

* Depollution attestations in industrial sectors
* Pulp and paper plants
* Oil refineries
* Hazardous waste
* Biomedical waste
* Ozone-depleting substances
* Stone and sand quarries
* Air quality.

They negotiate cooperation and environment management agreements. The regional offices issue authorizations and licenses to promoters or businesses planning to implement a project impeding environment quality. To obtain these authorizations, the company has to follow several steps. The company must fill an application which includes the plans and specifications of the project and contain a description of proposed activities, work methods, equipment, timetable, operation process. The application must also provide a description of the project's likely impacts on water, air, soil and surroundings necessary for the Ministry to decide on its acceptability. A detailed evaluation of the quantity or concentration of contaminants expected to be emitted, deposited, issued or discharged as a result of the proposed activity must also be included. With his application for a certificate of authorization, the applicant must also supply a certificate issued by the municipality attesting that the project does not contravene any municipal by-law. Of course, the applicant must clearly identify himself by providing its name, the address of its head office, the position of the signatory and the registration

number assigned to the applicant business by the Inspector General of Financial Institutions. The application must also include the land registry designation of the lots on which the project is to be carried out as well as a plan of the site on which the project is to be carried out, specifically indicating the zoning in the land in question.

Following a common US legal practice, the liability resulting from environmental damage is also a major issue in Québec. Recent legislation has assigned more liability to persons who own, occupy or control contaminated sites. This liability now extends to previous owners or occupants. Consequently, it is crucial for the acquirer or lender to be aware of all previous or potential environmental problems related to a given business property.

III.1.5- Legal Incorporation

Opening a business will bring a company into contact with the municipality and the Québec governments. Any company will also have to abide by certain laws and regulations. We have seen some of the most important ones above- building permits and standards, zoning bylaws, and environmental issues. In addition, regulations determine the operating permits and taxes. Generally, a permit is required to operate a commercial establishment in a municipality. The conditions for obtaining such a permit may vary from one municipality to the next. Of course, any company will have to pay all taxes levied by the municipality and the school board.

Before registering as an employer, the following steps must be taken.
Constitution and registration (legal publicity). This step is a key one in the incorporating business. As far as a Québec business incorporated as a joint stock is concerned, it is normally subject to the Companies Act. To incorporate a joint stock company, one must obtain the appropriate form from the Inspector General of Financial Institutions (IGFI) or Communication-Québec. Following the incorporation of a joint stock company, the Initial Declaration – Legal Person form is completed and sent to the IGFI within 60 days following registration.

Registration with the "Ministère du Revenu du Québec" (registration certificate). Most people and businesses carrying on a commercial activity and therefore supplying taxable movables, immovables or services must also register with the "Ministère du Revenu du Québec" to obtain a registration certificate for the Québec Sales Tax (QST, 7.5% since January 1, 1998) and the Federal Goods and Services Tax (GST, 7%). This certificate authorizes companies to deduct taxes on behalf of the "Ministère du Revenu du Québec" and Revenue Canada. The business must collect the QST and the GST in the course of its commercial activities and remit them periodically to the "Ministère du Revenu du Québec".

Any business with one or more employees must register with Revenue Canada as an employer to obtain a business number (BN). This number applies to the main business accounts of Revenue Canada, including deductions at source. The employer collects income taxes and employment insurance contributions from his employee for Revenue Canada and pays employee's contribution to employment insurance.
Companies must also have to comply with Labour Standards (Act Respecting Labour Standards) and the "Commission de la Santé et de la Sécurité du travail" (CSST, see hereafter for more information)

III.1.5- Worker-Related Safety Issues in Industrial Sites

Worker-related safety issues in industrial sites have to be taken into account when dealing with Permitting and Licensing. Any business person who employs at least one full-time or part-time worker, including a student or a trainee in certain cases only, must register with the "Commission de la Santé et de la Sécurité du Travail" (CSST).

As the administrator of Québec occupational health and safety plan, the CSST carries out its functions in many ways. It is concerned with, among other things, preventing work-related injuries, while at the same time acting as public insurer for both employers and workers. In addition, the CSST provides workers and employers with the services to which they are entitled. Hence, the CSST's duties with regard to prevention are to:

* promote occupational health and safety;
* assist workers and employers in their efforts to achieve a healthier, risk-free work environment;
* inspect work premises.

As plan administrator, the CSST's duties are to provide funding through assessments paid by employers. With regard to rehabilitation and compensation, the CSST's duties are to:

* compensate workers who suffer a work-related injury;
* provide the medical assistance required by a worker who suffers a work-related injury;
* rehabilitate workers who, as a result of a work-related injury, suffer permanent physical or mental impairment.

Serving workers and employers effectively is a priority for the CSST. Its programs and services are offered in twenty-one regional offices. Thus workers and employers have easy access to a representative who can make decisions in response to their needs. The CSST also provides information and counseling services to workers, employers, its partners, and the population at large. The CSST: meets with workers and employers in their workplace to make them aware of their rights and obligations with regard to prevention, and to inform them of the means and services at their disposal for exercising these rights. The CSST also supplies workers and employers with written and audiovisual material: studies on various fields of activity and the potential hazards involved, research data, prevention guides, handbooks on how to set up prevention programs and health and safety committees. It informs them on organizations that can assist them in the workplace, such as occupational health services and joint sector-based associations; It manages a documentation center, equipped with a public audio-visual library that can be accessed by computer anywhere in Québec and it maintains a computerized, toxicological index of all industrial or commercial products used in Québec; It gives employers direct electronic access to information and data that concern them; and it publishes and distributes many general or specialized information documents, and publishes a magazine, Prévention au travail, available free of charge.

III.2 The Legal Framework in the State of Georgia

III.2.1- Industrial Permitting in U.S. Federalism.

The U.S federal government has power under the supremacy and commerce constitutional clauses to preempt conflicting state and local activities. Building on this constitutional authority, federal law in certain areas establishes basic policies but requires States to administer them. Some programs give States the option and funds to administer them, if they meet the nationally determined conditions or standards. However, if a State chooses not to participate then, the national government steps in and directly runs the programs.

The Clean Air Act Amendments of 1970 called for mandatory partial preemption, in which the federal government set national air-quality standards but requires states to devise plans for their implementation and enforcement. At the other extreme from partial preemption are a few statutes that establish national programs but permit states to delay or even veto what the national government's legislative pronouncements. Therefore, federal laws and state laws often interact very closely with federal laws sometimes overstepping in the state authority field. The most common image to describe this set of constitutional relationships is the "marble cake" analogy, in which the horizontal layers (across levels of government) are crossed by vertical lines (across functions and policy areas of government).

III.2.2- Zoning and Use of Land

Zoning and land use is primarily a matter of state jurisdiction falling under State constitution and State laws. In the case of Georgia, Article IX of the Georgia Constitution vests zoning and land-use control in county and municipality authorities as local units of government. This is further highlighted by Title XXXVI, Chapters 66-67 of the Official Code of Georgia, Annotated. Zoning and use of land are established at the local level. Cities usually have their own zoning plan and counties establish county wide zoning which apply in all counties, except for special areas dedicated to particular uses. Some rural counties do not have county-wide zoning, therefore they do not have to comply with any zoning requirement other than state-wide environmental requirements. There are over 158 counties in the state of Georgia. Fulton County is one of the most important urban Counties. In order to get an overview of zoning policy in a county, we will review the case of Fulton County, which includes the municipality of Atlanta.

The Board of Commissioners is the elected governing body of Fulton County. It establishes policies, procedures, and regulations for the conduct of business within Fulton County government. The Board has adopted a Land Use Plan which sets several general recommendations for the desired use and intensity of uses of properties located in unincorporated Fulton County. This plan serves as a basis for recommendations on the zoning uses of any parcel of land. The plan is policy whereas zoning becomes law. It is mandatory that the appropriate zoning category or use permit be established for a piece of property before it is developed or redeveloped. If the property is not zoned for the intended use it must be rezoned and/or a use permit must be obtained.

Once appropriate zoning and use permits have been obtained, usually, the next step is to have a review by the staff in the Department of Public Works. This can be time consuming and frustrating if an experienced architect, engineer and/or land planner is not picked to prepare the elements of your development plans. The department is divided into four divisions, three of which are involved in the development process. The Engineering

and Support Services Division is primarily responsible for infrastructure, planning, development review and inspections for industrial projects. The Transportation, Construction, and corrections Divisions are involved in design, engineering and construction of county roads. The Water and Pollution Division is responsible for design an review of proposed public sewers, water lines and operation of county water pollution control facilities and water distribution facilities. After water and sewer tap-on fees have been paid and all plans have been approved by the development review staff, the usual next step is to obtain a land disturbance permit followed by building permit (s). These permits are obtained from the Inspections and Permits Department. If such items as septic tank, restaurants etc. are part of the development, Fulton County Health Department will require further permits and adherence to stringent regulations. During the construction phase of a project many inspections on such items as electrical, plumbing, heating/air conditioning, grading and landscaping will occur. The certificate of occupancy is the objective of all this work and it is granted after all inspections have been satisfactorily completed.

III.2.3- The Complexities of Building Codes in the United Stated: The State of Georgia

Construction Codes have become an important issue for Georgia local governments, building professionals and citizens alike. The following is a general overview of Georgia's Construction Code Program, including enforcement, local amendments, current codes, and whom to call if you have questions regarding construction codes and related issues in Georgia. In General, the Uniform Codes Act is codified at chapter 2 of title 8 of The Official Code of Georgia Annotated. O.C.G.A. Section 8-2-20(9)(B) identifies the fourteen "state minimum standard codes". Each of these separate codes typically consist of a base code (e.g. The Standard Building Code as published by the Southern Building Code Congress International) and a set of Georgia amendments to the base code. Georgia law further dictates that eight of these codes are "mandatory" (are applicable to all construction whether or not they are locally enforced) and six are "permissive" (only applicable if a local government chooses to adopt and enforce one or more of these codes). These codes are as follows:

1. Mandatory Codes: Standard Building Code; National Electrical Code; Standard Gas Code; Standard Mechanical Code; CABO One-and-Two Family Dwelling Code; Georgia State Energy Code for Buildings; Standard Fire Prevention Code; Standard Plumbing Code
2. Permissive Codes: Standard Housing Code; Standard Amusement Devise Code; Excavation and Grading Code; Standard Existing Buildings Code; Standard Swimming Pool Code; Standard Unsafe Building Abatement Code.

As noted above, the building, electrical, gas, mechanical, plumbing, CABO one-and-two family dwelling, energy and fire codes are mandatory codes, meaning that under Georgia law, any structure built in Georgia must comply with these codes, whether or not the local government chooses to locally enforce these codes.

In addition, since Georgia law gives the enumerated codes statewide applicability, local governments do not have to (and, in fact, should not) adopt the mandatory codes in order to enforce them (O.C.G.A. Section 8-2-25(a)). However, the local government can choose which of the mandatory codes it wishes to locally enforce.

The remaining codes are referred to as permissive codes. Unlike the mandatory codes, in order for a local government to enforce one or more of these permissive codes, the code or codes must be adopted, either by ordinance or resolution, by the local jurisdiction. A copy of the ordinance or resolution adopted must be forwarded to DCA (O.C.G.A. Section 8-2-25 (b)). In order to properly administer and enforce the state minimum standard codes, local governments must adopt reasonable administrative provisions. The power to adopt these administrative procedures is set forth in O.C.G.A. Section 8-2-26(a)(1). These provisions should include procedural requirements for the enforcement of the codes, provisions for hearings, provisions for appeals from decisions of local inspectors, and any other procedures necessary for the proper local administration and enforcement of the state minimum standard codes.

Georgia law also grants local governments other powers regarding code enforcement at O.C.G.A. Section 8-2-26(a). These powers include: inspecting buildings and other structures to ensure compliance with the code; employing inspectors and other personnel necessary for the proper enforcement of codes; requiring permits and to establishment charges for said permits; and contracting with other local governments for code enforcement. DCA periodically reviews amends and/or updates the state minimum standard codes. If a local government chooses to locally enforce any of these codes, it must enforce the latest editions and the amendments adopted by DCA. It has developed a sample resolution/ordinance that may be used as a guide for local governments in the development of their administrative procedures.

III.2.4- Environmental Permit Considerations

The two major difficulties in environmental permitting in the US have traditionally been slowness and uncertainty at the federal level and a multiplicity of different state agencies to deal with. The problems were reduced considerably by the one-stop service provided in Georgia by the Environmental Protection Division (EPD) of the Department of Natural Resources. Georgia's consolidation of environmental permitting authority resulted from Executive Reorganization Act of 1972 which transferred to EPD a number of programs previously handled by separate agencies.

The Environmental Protection Division (EPD) protects Georgia's air, land, and water through the authority of state statutes and major parts of five federal environmental statutes. These laws regulate public and private facilities having to do with water quality, air quality, hazardous waste, water supply, solid waste management, surface mining and other areas. It issues and enforces all state permits in these areas. It has received authority from the U.S. Environmental Protection Agency (EPA) to issue and enforce all permits required by federal laws (excepting wetlands permits). The ability to offer "one-stop" permit review and issuance makes the permitting process more efficient for applicants.

EPD does its work with a staff of 659 budgeted positions and an annual budget which exceeds $67 million (This includes about $25 million of federal loan funds awarded to local governments for wastewater projects and about $17 million for clean up of contaminated sites). The Division, for regulatory and permit review and issuing purposes, is organized as appears below. These units may be involved in granting permits depending on the complexity of the case and in spite of the single-stop shop approach espoused by the Department.

The Environmental Protection Division protects Georgia's air, land and water resources through the authority of state and federal environmental statutes. These laws regulate public and private facilities in the areas of air quality, water quality, hazardous waste, water supply, solid waste, surface mining, underground storage tanks, and others. EPD issues and enforces all state permits in these areas and has full delegation for federal environmental permits except Section 404 (wetland) permits. The ability to offer "one-stop" permit review and issuance makes the permitting process more efficient for applicants.

The Air Protection Branch is responsible for protecting Georgia's air quality through the regulation of emissions from industrial and mobile sources. The branch also monitors levels of air pollutants throughout the State. Facilities that treat, store or dispose of hazardous wastes are regulated by the Hazardous Waste Management Branch. The State Superfund is also administered by this Branch. The Land Protection Branch regulates solid waste disposal and treatment, scrap tire clean ups, lead and asbestos abatement, underground storage tank registration and remediation, and surface mining permitting and reclamation. Functions of the Program Coordination Branch are Division-wide in scope and include laboratory, emergency response, regional office operations, environmental toxicology, environmental radiation, radioactive materials, information management and training. The Water Protection Branch is responsible for protecting Georgia's surface waters. It regulates municipal and industrial wastewater discharges, nonpoint source pollution, storm water discharges, erosion and sedimentation. Monitoring and modeling of Georgia's waterways are also conducted by this branch. The Water Resources Branch regulates the use of Georgia's surface and ground water resources for drinking water, impoundment, agricultural irrigation, and other non-agricultural uses.

Prior to the filing of an application, the EPD may do a prescreening to tell companies if they are likely to receive a permit or not. Otherwise companies need to locate elsewhere. This prescreening is viewed by the investors as a critical success factor since they can tell in advance whether or not they are going to obtain the environmental approval and if they won't they can assess cost of adjusting their strategy to obtain permit issuance.

Here is a summary of EDP's generic permit application, evaluation, and decision process:

1- Initial Conference with Prospective Industry

New industries considering location in Georgia first contact the Georgia Department of Industry, Trade and Tourism which arranges a meeting with EPD to discuss environmental protection requirements relating to the proposed industry. An in-house "industrial-technical task force" then meets with the prospective industry, discuss its processes, explains Georgia environmental regulations, and answers questions about the industry's effluent discharges and emissions, solid waste management, and water supply and quality requirements. This task force consists of experts familiar with the type of industry under construction. (At this stage, EPD often knows only the nature of the industrial process and not the firm's identity)

2- Environmental Engineering Reports and Permits Applications

Following the initial conference, the company prepares an environmental report and completes permit applications. First, this report describes the industry's operation, raw

materials required, hazardous materials that may be handled, and materials requiring disposal. It also provides a schematic of the industrial process showing waste and process water and identifying water discharge, air emissions and other environmental engineering aspects of the operations. Amount of water needed, emission characteristics and wastewater discharge concentration should be included in detail. Finally the report addresses, by category, each kind of permit needed and provides supporting information-detailing steps to ensure compliance with environmental requirements.

3- Submission of Report and Applications to EPD

Generally, 60 to 90 days elapse between the initial conferences and submission of the environmental engineering report and permit applications. Industries may take as long as a year or more, however, to submit this information, depending on their individual plans. After receiving the report-permit package, EPD assigns it to the technical task force. Task force members review it based on their expertise in specific industries (chemical, power generation, pulp and paper) and in areas of environmental regulations (air, water, solid waste). This procedure enables EPD to better determine if all necessary permits have been requested and if solution of one environmental problem might lead to another. EPD usually conducts the necessary modeling for air emission and water quality impact on receiving streams to assure that all federal/state standards will be met by the proposed installation. If any other information or permits are necessary, the industry is so advised.

4- Evaluation of Report by EPD

Permit application for major industries are normally processed in 90 days. (Generally EPD will have already worked with an industry for 60 to 90 days before filing, ensuring staff familiarity with environmental requirements). Permit applications are processed by the appropriate branch of EPD (Air, Water, or Land Protection). Consultations are held as needed among division and branch staffs, all of which are located in Atlanta, and with the applicant. Applicable requirements and technical analyses then provide criteria for evaluating application and for recommending permit conditions to the EPD director. Draft permits are prepared and reviewed with the applicant to assure general understanding of requirements.

5- Public notice

After submission of permit applications, any required public notices are placed in the news media and sent to other interested persons. All NPDES permits require a minimum of 30 days public advertisement.

6- Public Hearings

If requested by the public and deemed appropriate by the EPD Director, a public hearing on the permit request will be held, following a 30-day notice. Public demand necessitates hearings on very few new permits, attesting to the credibility of Georgia's environmental regulations and enforcement and to the excellent cooperation among EPD, industrial prospects, conservation-environmental groups, and economic developers. If a public hearing produces evidence justifying a change in the permit recommendation, it will be made in keeping with state and federal regulations. Georgia EPD seldom denies a permit to a prospective industry. By working together in the process outlined above, the siting and permitting decisions have minimized the need for any denials.

7- Signing of permits

The EPD Director is the sole person authorized to issue permits or orders. This authority cannot be delegated to anyone else.

8- Appeals Procedure

Within 30 days of permit issuance, anyone aggrieved or adversely affected may petition for a hearing before DNR's Administrative Law Judge. Hearings and administrative reviews are conducted in accordance with the Georgia Administrative Procedure Act. Administrative Law Judge's decisions can be appealed to higher courts. Another significant factor in successful administration of Georgia's environmental protection laws is legal counsel from the State Attorney General who has an assigned staff of attorneys to assist EPD. All laws are assigned to a lead and backup attorney, ensuring expertise and continuity in the Attorney General's Office in every area of permit issuance and permit.

9- Environmental Resource Management

Another positive element of Georgia's permitting process is the Resource Allocation Authority, by which EPD allocates surface and ground water as well as assimilative capacities of both air and receiving streams. Georgia permit-holders are thus assured that other industries or local governments will not be allowed to encroach on its assigned resources.

10- No Environmental Impact Statement (EIS)

With its coordinated permit and the environmental engineering report, Georgia has established adequate review of environmental considerations without the requirements of an EIS. This often saves 12 to 24 months for a prospective industry.

III.2.5- Legal Incorporation

The actual process of filing a corporation in Georgia is not difficult. The office of Secretary of State is the filling depository for articles of incorporation and other corporate filings required by Title of the Official Code of Georgia Annotated. The general procedures for filing articles and incorporation for Georgia profit or nonprofit corporations are as follow:

Name Reservation. A proposed corporate name must be reserved by the incorporator or the attorney prior to incorporation.

The incorporator must prepare the following documents to be filed with the Secretary of State after the corporate name reservation is confirmed.

BSR Form, This form will be mailed to the incorporator with the corporate name reservation certificate.

Original Articles of Incorporation.

3. Notice of Intent to Incorporate and Fee: The applicant 's signature on BSR form certifies that a notice of incorporation and an appropriate fee has been forwarded.

4. Name Reservation Certificate.

The Secretary of State provides only a ministerial review of the Articles of Incorporation to determine if they comply with the minimum filing requirements of the Code. Articles of Incorporation will not be reviewed for matters such as tax status, corporate finance, or compliance with other business or regulatory laws.

III.2.6- Worker-Related Safety Issues in Industrial Sites

Georgia is a federal OSHA (Occupational Safety and Health Administration) state. This means that the enforcement of occupational safety and health regulations is performed solely by federal employees and is not by a delegated state or local-level entity. OSHA does not work in a priori permits, authorizations or licenses. Rather, it

enforces regulations a posteriori through on-site inspections and subsequent issuing of citations with penalties. OSHA officers control plants, equipment, and related facilities through site visits to ascertain if industrial facilities comply with federal requirement pertaining conditions of work as stated the Occupational Safety and Health Act of 1970, as amended.

Meeting OSHA requirements has a direct impact on the full range of construction and environmental permits for industrial projects required for firms. Often OSHA standards condition the manner in which the plant workspace and environmental safeguards are designed and presented in the permit applications. Consequently, it might be argued that OSHA standards, which are nationwide in nature, have a direct impact in the application process for construction, environmental and related permits as worker safety is so clearly related to plant design as well as air and water purity.

OSHA priorities for inspection bear noting:
Imminent Danger (someone is in immediate danger)
Fatalities and catastrophic events, (3 or more hospitalized employees)
Complaints can trigger inspections and site review(s)
Programmed inspections (critical for a firm's continued operations)
Follow-up inspections (returning to places already inspected)

Penalty amounts will vary depending on the type of violation, size of the company, history of the company, and "good faith" (difficult to measure). A "serious" hazard penalty can be up to $ 7,000 per occurrence. "Willful" violations (a company knew or should have known about a hazard and showed disregard) can be up to $ 70,000 per occurrence. Most of the really large penalties one read about in the paper involve willful or repeat violations. OSHA is a federal agency with nationwide jurisdiction. It has three offices in Georgia to carry out the purposes of the Act.

The Agency, upon presenting appropriate credentials to the industrial facility owner, operator, or agent in charge, is authorized
to enter without delay and at reasonable times any factory, plant, establishment, construction site, or other area, workplace or environment where work is performed by an employee of an employer; and
to inspect and investigate during regular working hours and at other reasonable times, and within reasonable limits and in a reasonable manner, any such place of employment and all pertinent conditions, structures, machines, apparatus, devices, equipment, and materials therein, and to question privately any such employer, owner, operator, agent or employee.

IV- The Permitting Performance of Sampled Firms and Authorities in the Province of Québec and in the State of Georgia

IV.1- An Overview Presentation of Firms and Authorities

The ten cases selected are identified in Appendices A (Quebec) and C (Georgia). They conform to the master study requirements as to industry sector and size as measured by number of employees. Exceptions when they occur were cleared with the overall study manager.

IV.2- Obtaining the Needed Information (Assistance from Regional Authorities)

In identifying our samples of target firms and public authorities we worked closely with the State of Georgia Department of Industry, Trade, and Tourism's Economic Development Division and the Province of Quebec's Ministry of Trade and Industry, Investment Quebec division, among others. Firms gave their prior agreement to be interviewed. In two cases we had to change initial firm selections because of non-response by individuals (machinery industry cases in both Quebec and Georgia). The usual guarantees of confidentiality were extended to participants in the twenty study interviews.

IV.3- Input Benchmarks

This section seeks to evaluate the performance of the administrative processes for industrial permits, licenses, and authorizations and estimate costs to the company and public authorities. This is done based on available and confirmed information (from interviews, published material, websites, among others).

A. Québec

Number of authorities and services per process: It must be underlined that the environmental permitting process is a matter of provincial jurisdiction while construction permitting is a municipal matter. A similar division of labor roughly prevails in the case of Georgia, reflecting the federal nature of both countries.

For environmental type permits: For each of the cases we studied, there was a single authority for each environmental permit and usually a single identifiable individual in charge of the application file. As far as the environmental authorizations are concerned, companies always deal with one expert in one of the seventeen regional offices of the Québec Ministry of the Environment. The regional office expert is selected based on her or his industry experience (See Appendix B.4.2 for an interview of an environmental commissioner). Most of the time, the same authorities are not only involved in the decision but also in the pre-application counseling. Therefore, the pre-application advisor and post-application decision maker are one and the same. However, companies themselves (with the possible exception of large prospective investors) have to make the first move to take advantage of this assistance. Some companies miss this opportunity (e.g., Boulangerie St Méthode with the Ministry of Environment, interview B.1.1).

For construction type permits: Similarly, for each of the cases we studies, there was one clear authority for construction permits at the local level. Such individuals involved are either a building inspector (see Appendix B.1.1 for an interview with a building inspector) or a designated person on the City Council or, in Metropolitan Montreal, an Urban Council. In many cases, economic development offices like

Investment Quebec, at the provincial level, or Urban Community of Montreal (a metropolitan association of twenty eight municipalities in Greater Montreal), local Chambers of Commerce, among others, will provide contacts and general information. Such assistance provided by the building inspector's office enables a perfecting of applications even in cases of disagreement with the companies. Assistance can be very informal (see B.1.2), but most of the time there is a partnership (see interview B.4.2). More generally, the assistance is more efficient if there is one specific employee in the Municipality or in the regional office of the Ministry of Environment who is responsible for one specific company. Other organizations like the Urban Community of Montreal (see appendix B.3.2), regional economic development centers (see appendix B.2.2), or industrial parks (see appendix B.5.2) also play a critical role in the permitting process. They act as facilitators--intermediaries between the companies and the authorities.

Cost to Enterprises and Public Authorities: For local construction permitting: The costs to companies vary according to the complexity and size of the project. Basically, expenses are internal (employees involved inside the company) and external (consulting firms, architects, engineers hired for the project). In all the cases we studied, except Bestar, (see Appendix D) expenses were both external and internal. Internal expenses are cost of management (CEO, CFO time) and sometimes cost of engineers who deal with blueprints, the official application (see Bestar Appendix B.4), among other items. Goodyear also had its own company engineer involved in the industrial investment project. External expenses are primarily the costs of a local consulting firm, independent engineers, or architects. In the case of the industrial bakery of "Boulangerie St Methode," two external consultants (an architect and an engineer) were retained (who also dealt with blueprints, plant design, relationship with authorities and environmental and impact analysis issues as well as construction ones). They each charged 3% of the face value of the industrial investment or Can$120,000. Our interview was unable to split the industrial permits component but we estimate it at fifteen percent of this overall figure or $18,000.

We estimate that the cost for construction permitting for public authorities in the case of Boulangerie St Methode amounted to approximately Can$5,000 or five man-days. In the case of the Goodyear industrial project, the authorities estimated that they spent fifteen full days or Can$15,000. In a third case, Ventrol, authorities took two full work days to analyze the application for a total cost of Can$2,000. Finally, in the case of Bestar, the cost was estimated at Can$2,000. For Astra, because it had special zoning consideration as it was located in an industrial zone and the application file was presented by the Technoparc staff, the permitting cost was one day of work or Can$1,000.

For environmental permits: Our interviewees estimate that the cost for public authorities in the case of Boulangerie St Methode was Can$4,000 or four full work days. In the case of Ventrol, a machinery company, the cost was estimated at Can$1,000. In this case, because of the excellent personal connections of the CEO as well as the intercession of the Urban Community of Montreal, the application was greatly speeded up. For Bestar, a wood products company, the public authority cost was Can$4,000. The cost ratios, based on interviews, are similar for environmental and construction permitting. Ministry of Environment officials indicate that for an average, relatively uncomplicated permit application about 20 man-hours is the usual time required by a Regional Office to process the permit from start to finish.

A follow-up to environmental permits is compulsory each year in the form of analysis of samples (air, water, or soil, according to the industry and impact on environment) and results reporting to the Ministry of Environment's regional office. Samples are collected by private firms and expenses are borne by companies.

B. Georgia

Number of authorities or services involved per permitting process:

For construction type permits: our five Georgia case studies indicate that typically three authorities are involved: the County Building Inspection Office, the County Health Department (sometimes referred to as County Environmental Health) and the Fire Marshall. Within County Government, depending on the county (note that there are over 158 counties in Georgia) and the county's level of urbanization, there may be up to thirteen (see the case of Clarke County) reviewing divisions which may impose ad hoc requirements. Clarke County has probably the most complex process because the subdepartments which may be involved include: public utilities, public works, traffic engineering, solid waste, etc. For more rural counties which do not benefit from a zoning master plan (such as Colquitt and Gilmore counties in our case studies), the process is far simpler and boils down to two or three "services."

For environmental type permits: The process has been considerably simplified with one single statewide agency in charge of all environmental permits (air quality, drinking water, hazardous site cleanups, hazardous waste management, radioactive materials, solid waste management, lead-based paint, asbestos abatement, storm water, surface mining, underground storage tank). Typically, new industries locate in areas served by municipal water and sewer systems and, in such a case, the only permit necessary is an air emission permit or no permit at all. For each category one single division handles the entire permit process. Each division has highly trained industry experts on staff. There is a single point of information on a website (http://www.ganet.org/dnr.environ/branches), forms can be obtained on the web and printed but not filed electronically, and one of the EPD's branches insures coordination with all other branches and departments of state, federal, and local governments in matters of permit issuance.

Costs to enterprises and public authority: Our figures are best estimates. Some of our interviewees did not recall the specific costs but were able to provide "guesstimates" on the basis of our insistent line of questioning. Based on the case of Merial Ltd., the plant manager estimated that for a US$1.4 million expansion, the cost of the building permit processing for the enterprise amounted to $20,000. (or 200 man-hours). This higher than expected cost was due, in part, to the fact that the Fire Marshall's office requested several adjustments and changes in original layout design. In the case of Pramac Industrial Inc., the estimated cost to the company was $8,000. for a "brownfield" shell building modernized and upgraded. The square surface was 92,000 square feet and amounted to an investment of US$ 3 million. A third case of relevance is that of Anthony Forest Products in which the costs amounted to US$5,000 for the construction permit for a sawmill.

The general practice of local counties in Georgia has been to set permit fee schedules at a level which will allow them to recoup their actual man-hour costs. In the case of Merial Ltd. in Clarke County, an urban and fairly sophisticated county from an administrative standpoint, the cost to authorities is 21 man-hours for a corporate investment of US$1.4

million with a surface of 50,00 square feet (32 foot high pre-engineered metal structure). In the case of Whitepath Fab Tech, the estimated cost to the County (including processing time and check fields) was US$8,000.

For state environmental type permits, in Georgia, the actual costs of permit application to the enterprise were considered "negligible" in rural countries where the air and water quality standards are not as stringent as they would be in a highly urbanized, densely populated metropolitan area. In the case of Anthony Forest Products, the cost to the company for an air quality permit was estimated at US$5000. This is a highly air polluting industry and therefore, though in a rural area, the permit was somewhat more complex. In general, for environmental permits in Georgia, because the process is considered quite efficient with a single-stop shop approach paired with a pre-application screening procedure, the costs, overall, are estimated to be marginal. This naturally does not take into account costs associated with environmental impact assessments, effluent and pollutant chemical tests that might be required or the use of consultants to adjust plant configuration to air and water standards.

Usually, in Georgia, consultants who might be used in guiding the application process would be paid an average of US$80 to US$125 per hour (Quebec is estimated at 60% of this figure). It is noteworthy that Georgia Tech University's Economic Development Institute, through its Industrial Extension Divisions in the field, will provide, free of charge, a range of such consulting services to Georgia firms. As a general rule, the State of Georgia's Environmental Protection Division does not levy fees for its services or issuance of applications. Only for industrial plants emitting large amounts of polluting effluents and large quantity generators of hazardous waste is a fee of any kind levied.

IV.4- Output Benchmarks

A. Québec

The process for Provincial environmental permitting, whatever the type of environmental permit, is remarkably more rapid than many other jurisdictions in North America. The Quebec Ministry states that it aims to complete the process and issue permits in a turnaround time of one month, with a range of "same day" issuance for a straightforward permit up to ninety days. The Ministry must, by statute, make a decision in less than 90 calendar days. In practice, our interviews indicate the following: for Boulangerie St Methode the time spent was two full months. In part, the Ministry's regional offices called on Ministry's headquarters experts for site visits and more detailed analyses, prior to permit issuance. Similarly, Ventrol's case required a period of one month, owing in part to the simplified process in Anjou industrial zone. Bestar also required a period of one month. Goodyear's industrial project, in spite of its large size, took a period of two months. This is partly explained by the fact that Goodyear has a significant economic weight in the local community , that it resorted to the use of several expert consultants , and that the site selected was already used for tire manufacturing with a number of permits already in force.

For local construction permits, our interviews indicate that the average time for the permit to be received by the applicant is less than three weeks. Boulangerie St Methode took less than three weeks while Goodyear's expansion-related construction permit was handled in one full month. The shortest case we encountered is that of Astra: less than two weeks. The other cases surveyed took two weeks on average.

Therefore, it can be said, based on our limited sample, that the construction permitting process satisfies most, if not all, applicant companies.

Frequency of Complaints: Complaints by enterprises are infrequent. While no specific case does stand out, however, there seems to be a consensus among enteprises that municipal authorities and Ministry for Environment's regional offices do not communicate efficiently or often enough to insure the necessary coordination allowing for prompt ground breaking. This particular difficulty is easily overcome through mechanisms such as the metropolitan Urban Community of Montreal , Technoparcs, and regional economic development offices which are able to close the communication gap. An interesting case in point is that of Boulangerie St Methode which, unaware of the permit requirement, incurred a two-month delay in obtaining the actual permit. For public authorities, we noted that applications are often incomplete and do not include the required supporting documents. Perhaps this is indicative of a lack of pre-application screening, which in Georgia, by contrast, appears to work out better in matters of environmental permitting. One source confirms that over 50% of environmental permit applications do not meet requirements and require resubmission.

Predictability of procedures for applicants: Generally, because Quebec pursues industrial investments aggressively, there is a general assumption that, staying within the meaning of the law and regulations, most noncontroversial applications will be granted speedily. Some uncertainty may occur for non-Quebec firms seeking construction in smaller rural communities but this observation is in fact similar to the one made for the State of Georgia.

Means of Communications: The use of internet to obtain permitting information is not as widespread in Quebec as it is in Georgia. The primary means of communications is personal when economic development associations are involved. There are no formal meetings such as roundtables or review panels instituted in Quebec's permitting processes.

Deadlines: There are environmental statutory deadlines for environmental permitting but not for construction permitting.

Official Counseling: Extensive counseling and assistance is available from local economic development agencies or Investment Quebec at the Provincial level. Additionally, the regional offices of the Provincial Ministry of Environment regularly offer informal ad hoc "roundtables" to prospective investors.

B. Georgia

For State-level environmental type permits: Whether it is an air, water or wastewater permit, the time taken by the Georgia EDP is on average four months (with a range of two to nine months), depending on the nature of the application, according to two detailed interviews with Mr. David Ward, Associate Director of EDP. The case of International Poultry Breeders, in which an air and water permits were required, indicates a period of 90 days. In the case of Anthony Forest Products, the air quality permit took a full six months but a temporary permit was obtained in two weeks pending issuance of the permanent air permit.

For local construction type permits, in general, based on our case studies, the average length is ten working days from the original submission to issuance. Fifty percent of applications are accepted on first application; the balance requires resubmission with requests for more information or redrafting of the single application

form and file. For resubmissions, our interviews indicate that no data are kept but in the case of Pramac Industrial, it took sixty days, though this is considered somewhat of a special, if not aberrant, case. In the case of Merial Ltd., it took five weeks with resubmission to seven County government divisions.

Frequency of complaints: In the case of environmental permitting, industry in Georgia has rarely complained because the process, by U.S. standards, is considered time-sensitive and relatively efficient with a single-stop shop approach general praised. Complaints rather emanate from local and statewide environmental groups which consider that the implementing agency is too quick to accommodate permit requirements by industries. EDP has a public notice process taking effect after submission of permit application. A public hearing may be held if deemed appropriate by the EDP Director, following a 30-day notice. This is a rare occurrence.

Georgia is a fast-growing state which has evolved from a rural-based economy to a post-industrial economic base at a rapid pace. It is generally considered a "business-friendly" state by foreign and U.S. investors alike and regulatory processes are reputed to be de minimis. For building permits, the process is highly mediated through local general contractors, architects, surveyors and the like who are generally well connected with the local County permitting authorities. It is an infrequent occurrence for an industry to raise major complaints about construction permitting. We did, however, encounter one such case (Pramac Industrial) in which the relations between the enterprise and the local municipality were unusually adversarial and resulted in complaints and tension.

Average length of time for authorization to become legal: For environmental permits, they become legal thirty days after issuance during which period industry or any citizen of Georgia can appeal the permit issuance. However, temporary environmental permits can be issued pending the issuance of the final and permanent permit. In the case of construction permits, they become legal and effective immediately upon issuance.

Predictability of procedures: In matters of environmental permitting, because the State implements federal rules and does so through a single streamlined agency, the predictability is generally considered high. This is further highlighted by the fact that a pre-application screening is available to any industry with EDP (without even providing the corporate identity of the prospective applicant enterprise) to determine likelihood of granting. Most local governments have actively promoted, especially in rural counties some distance from major urban centers, industrial investments. They will generally facilitate the permit granting process at the local level and often Chambers of Commerce and Economic Development Offices will take proactive steps to insure permit granting. Procedures do vary from county to county and there is not statewide standards in construction permit granting.

Means of communications/availability: For environmental permitting, a state website is available. Forms and permit applications can be downloaded. For local construction permits, the process is far less streamlined and often the procedures, outcomes, and times required vary from one county to the next. Most counties do not yet have website applications or email. We note, however, a general tendency by growing urbanizing counties (such as Cherokee, northwest of Atlanta) to develop sophisticated websites with construction and other forms easily downloadable. The process, however, has barely begun.

Deadlines: For environmental permits, the statutes do not specify deadlines or timelines for EPD. For construction permits, we are increasingly noting a trend of rapid turnaround (assuming completion of applications with supporting documents) with the goal of approving construction permits within ten days, if they are problem-free which is the case at least 50 percent of the time.

Official counseling: EDP offers a pre-application industrial screening which is further supported by the Georgia Department of Industry, Trade, and Tourism for out-of-state prospective investors as they select an industrial site within the State. A noteworthy feature of the State of Georgia is the existence of the Georgia Tech University-based Industrial Extension Divisions (eighteen regional offices) tasked with providing assistance to Georgia firms in matters of regulation, technical issues, and business plans, among others.

IV.5- Process Benchmarks

A number of qualitative observations and comments can be derived from the two North American studies which are roughly in the nature of "process" benchmarks. They indicate a path to achieving better or "best" practices.

From the standpoint of the enterprise:

1. Developing and Accumulating Task-Related Expertise and Experience: Newly created firm and smaller sized firms typically lack the invaluable experience of successfully filing industrial permit applications. The learning curve is a steep one with, relatively high costs to reach a comfort zone with the full range of regulatory permitting. A marginal regulatory cost or burden logic quickly sets in for firms which have gone through the process in the same or different local jurisdictions. A mix of familiarity to regulatory and documentary burdens , good tactical contacts in the municipal or state/provincial agency of jurisdiction, and industrial project management expertise. Regulatory information needs to be obtained during the pre-investment site selection and must be integrated in the industrial project design phase. Lack of knowledge can be compensated by retaining the services of expert consultants. The paradox is that smaller firms are more likely to apply on their own.

2. Organizational and Firm Decision Making: Investment and locational decisions reflecting the broad range of skills and departments within the firm make for a more efficient process. Industrial permit issues should be addressed as a matter of course in the decision matrix of a growth-oriented company. Organizationally speaking, an industrial project manager can act the "linchpin" and elicit input from all the impacted departments and managers. Internal gaps in industrial permit knowledge and location-specific information can be compensated by retaining the services of a competent and connected consultant.

From the standpoint of public authorities:

1. Inter-Organizational Coordination Process: Both in Quebec and Georgia, the lack of inter-organizational coordination across jurisdictions, agencies, and classes of permits is significant. Environmental permitting is coordinated through Provincial and State agencies which have coordinating mechanisms in place to insure the a predictable process. However, construction permits are, by and large, uncoordinated with great implementation latitude vested in various municipalities and diverging levels of administrative stringency between urban and rural local communities. Moreover, environmental-related and construction-related permits tend to run on parallel tracks.

The "three C's" of inter-organizational coordination—the uses of committees, clearances and compromises—are generally lacking in insuring that industrial permitting is an integrated process.

2. Information Provision Process: The provision of timely and relevant information by public authorities to enterprise before and during the application process is critical. The uses of internet sites to provide regulations, forms, timelines, etc., create unique opportunities to remedy information gaps. An informational single stop shop for all classes of permit information is unavailable. Open door personal counseling is available but tends to be industrial permit-specific rather than process-related. A process of "consultation" should be allowed between the applicant firm and the public authorities' experts. Public authorities discourage the use of the expression "negotiation." Application-specific documents should be made available simultaneously rather than sequentially to all officials involved in review.

3. On the Job Training: Continuing education training for public authorities experts as well as improvements in computerization and uses of internet technologies to track application can reduce delays and anticipate problems.

V- Analysis of Current and Best Practices in the Province of Québec and the State of Georgia

V.1- Québec's Select Best Practices

Five case studies were analyzed individually in terms of three types of benchmarks. Based on these studies, we will consider what are the most salient "best practices" in the Province of Quebec. These best practices are based solely on the information gleaned from the case studies identified in Appendices A and B. This part of the study is neither prescriptive nor do the observations generalize beyond the case material. It is assumed, given the representativeness of the sampled cases, that they reflect current practices in Quebec.

From the standpoint of the Quebec enterprise:

1. Companies tend to obtain a faster response time (up to half as fast) from public authorities, in matters of construction permits, when they seek information and support from local economic development authorities prior to application. Additionally, their applications, in such cases, have fewer problems and generate fewer requests for supplementary information or amendments from the public authorities.

2. Companies which retained local consulting firms (i.e., experts), in cases involving complex construction permit issues, obtained a faster turnaround in the issuance of permits and authorizations. Similarly, their applications and supporting documents (blueprints, design, etc.) were generally defect-free. Resorting to expert consulting firms which facilitate land purchase, industrial design, and interface with local and provincial government authorities is an approach common to larger size companies in Quebec. It is not as common among smaller firms.

3. Companies taking permit requirements into account in the pre-investment and pre-application stage tend to obtain permits more rapidly. This could take the form of informally contacting the relevant industrial regulations experts, official experts on plant engineering, construction inspectors.

4. Companies which adopted variants of a "task force" (involving the key company decision makers or departments) approach dealt more effectively with the various aspects of permitting (industrial safety, construction and trades-related requirements, zoning, environmental protection, neighborhood protection). The quality of their permit applications was higher and desired outcomes were more quickly obtained.

5. Companies organized to handle supplementary information or documentation requests (better records keeping, designated persons responsible to provide quick answers, ability to resort to expert opinions), following a permit application, were better able to adapt and cope with the uncertainty of the permit application process.

From the point of view of Quebec public authorities:

1. The existence of "Technoparcs" is a unique concept in which the technology parks work closely with the City Council and permit issuing authorities. Technoparcs have special delegated authority which allows them to recruit companies for their area, assist them with incentives, and facilitate the issuance of permits. Under current Technoparc practices, construction can proceed without an official ownership title. Technoparcs work closely with the Ministry of Environment and other provincial offices.

(An example is the Technoparc Saint-Laurent; for more information see http://www.technoparc.com/francais).

2. City Councils have granted greater delegated authority to building inspectors to issue construction permits, thereby reducing the processing time and diminishing the involvement of elected municipal councils, particularly, in smaller communities.

3. The Province of Quebec Ministry of Environment has moved from a legalistic orientation to a "results-oriented" approach in dealing with industrial permit applicants. It has displayed more flexibility in handling technical requirements. This administrative flexibility has been encouraged by provincial legislation and is reflected in the case studies.

4. The Provincial Ministry of Environment has also instituted mandatory and elective continuing education and "on the job" training for existing employees in an effort to improve performance in matters of permit issuance and enforcement. Such training has paid off so that typically seven days is enough to issue a low-complexity environmental industrial permits within seven days.

5. The Provincial Ministry of Environment has recently made available most of its permit application forms available for downloading on the internet (http://www.mef.qc.ca). Applicants cannot submit applications and supporting material electronically but they can obtain the required forms and some of the supporting information on the internet, thereby reducing the timeline.

6. The Provincial Ministry of Environment has recently implemented statutory deadlines, legislated by the Quebec National Assembly, within which to process industrial environmental permit applications. Processing of an application cannot exceed ninety days from the moment it is filed with the Ministry's regional offices. Statutory deadlines have made timeliness a priority for the Ministry and its permit issuance regional directorates. Such statutory deadlines allied with computerization of the internal administrative processes and continuing education represent "best practices" of which the Ministry is justifiably proud.

7. Pre-investment roundtable meetings between municipal authorities and Ministry of Environment officials and potential industrial investors are encouraged though they are not required by the enabling legislation. When used, they provide essential information and guidelines for successful and timely applications. Note, however, that applicant industry would have to request a separate meeting with the municipality and the Ministry and the meeting would not be a joint one.

8. The Provincial Ministry of Environment has regionalized its operations: seventeen regional directorates handle 15,000 applications yearly for the entirety of the Ministry, of which the majority relate to industrial use permitting. This has brought the process closer to applicants and made the regional directorates more responsive to request for information and applications.

V.2- Georgia's Select Best Practices

Five case studies were analyzed individually in terms of three types of benchmarks. Based on these studies, we will consider what are the extant best practices in the State of Georgia. These best practices are based solely on the information gleaned from the case studies identified in Appendices C and D. As indicated earlier, this part of the study is neither prescriptive nor do the observations generalize beyond the case

coverage. It is assumed, given the representativeness of the sampled cases, that they reflect current practices in the State of Georgia.

From the standpoint of the Georgia enterprise:

Some of the enterprise best practices evidenced in Georgia part of the study deserve special mention:

1. Most of the Georgia companies studied developed close working relationships with the local (county or municipal level) economic development agency or Chambers of Commerce in the community where they invested. Such relationships were initiated in pre-investment stages as a company negotiated the terms and conditions of its industrial investment in a particular county (tax write-off incentives and "tax holidays," local investment loan programs, worker training requirements and assistance, utility and sewage connection, public access roadways to the industrial sites,etc.) This facilitated the process of obtaining local construction permits as it had the impact of making local permit officials more readily accessible.

2. In matters of environmental permitting and testing, Georgia companies have made excellent tactical use of the Georgia Institute of Technology's Economic Development Institute and its expert environmental and safety engineers covering a full range of industry sectors. The unique industrial assistance services offered by this state-sponsored and partially state-funded organization are made available through nineteen regional offices in the State of Georgia. Operational uses of these services by small and medium-sized Georgia-based companies represent a unique university-government-industry partnership in dealing with matters relating to industrial engineering and permitting (Practical select examples availabe at http:// www.edi.gatech.edu/impact/).

From the standpoint of the Georgia authorities:

1. The State of Georgia offers its industries both a "single-stop" shop consolidated state environmental program and delegated authority from the U.S. Environmental Agency for issuance and enforcement of all industrial federal and state environmental permits.

2. The State of Georgia Environmental Protection Division makes systematic use of an initial screening conference with prospective industry consideration a location in Georgia.

3. An in-house "industrial-technical task force" meets prospective industry, discusses processes, explains environmental regulations and seeks to answer questions about industry's effluent discharges and emissions, solid waste management, water supply and quality requirements. The task force experts are familiar with the specific industry under review.

4. By practice of the Division, a period of sixty to ninety days elapses between the submission of a general industry environmental engineering report and submission of permit application. The engineering report addresses by category which types of environmental permits are needed and the Division then provides supporting information detailing all requirements and supporting documents.

Once the formal application is filed with the Division, it is normally processed in 90 days or less. By then the Division has already worked with the company for 60 to 90 days before filing and staff has developed the necessary familiarity. (Temporary permits may be issued pending issuance of a final permit.)

6. For construction permits, Georgia cities and counties are increasingly studying options for downloadable construction permit applications on the internet (for example, the City of Canton, in one of the studied cases, http://www.canton-georgia.com).

7. Construction permit fees are set by Georgia counties on a sliding scale and municipalities at a level which allows recovery of actual man-hours expended by the municipality or county.

V.3- ENABLING FRAMEWORK CONDITIONS

In assessing enabling framework conditions which promote best practices and their performance measurements, we have used as generic analytical categories the June 1997 benchmarking study report prepared for the Vice President of the United States, "Serving The American Public: Best Practices in Performance Measurement" (http://www.npr.gov/library/papers/benchmrk/nprbook). We review salient enabling conditions for both the Province of Quebec and the State of Georgia hereunder.

Enablers with the Authorities:

1. Executive Involvement: Quebec Ministry of Environment and municipal leaders have come to realize the importance of insuring a timely, reliable, predictable permitting process. This has resulted in a "top-down" effort to implement far more responsive industrial permitting systems. Legislative mandatory environmental deadlines have also been passed into law. No deadlines were legislated in Georgia but administrative time deadlines were evolved. The Georgia Department of Natural Resources' Environmental Protection Division leadership has focused singular attention on the issue of predictability of its permitting process.

2. Sense of Urgency: In both the cases of Quebec and Georgia , the search for direct investment projects in an increasingly globalized world economy and regionalized North American economy (North American Free Trade Agreement) as well as their governments' commitment to increased industrial output and employment led to a newfound sense of urgency in removing unnecessary obstacles and legalistic approaches in matters of permits. Legislative urgency is also a factor: the Provincial legislature now imposes specific deadlines for environmental permit processing.

3. Alignment with Strategic Direction: The organizational vision of the Quebec Ministry of Environment and various Quebec municipal authorities needs to be clearly communicated to both employees and external clients. This vision is one of "results-oriented" service and problem-solving responsiveness. This is made evident in the cases reviewed in the Appendices and in the published materials and websites of the concerned Ministry and regional directorates. In the case of Georgia, the reorganization and consolidation of all environmental permitting functions has insured great alignment of organization with strategy. Many Georgia municipalities are in the process of realigning their construction permitting procedures with the faster pace of industrial growth in Georgia (case in point is the City of Canton).

4. Conceptual Framework: Quebec public authorities dealing with permits and authorizations are increasingly demonstrating their ability to institute performance systems in line with the organizations' fundamental goals. The balancing of environmental protection and economic development on a case-by-case requires a solid conceptual framework taking into account performance, accountability, predictability

(i.e., minimizing arbitrariness of outcomes), and timeliness. Quebec, much like Canada, has a dual commitment to attracting investment in job-enhancing industries and preserving a unique environmental heritage. In Georgia, traditionally rural municipalities and counties are reviewing their zoning and construction permit procedures in the face of growing industrial investment.

5. Communications: Interviews with Georgia and Quebec permitting officials indicate that a more sophisticated and extensive use of internet technology to (a) communicate interactively with the industrial permit applicants, (b) make available readily "downloadable" full legal texts, precedents, etc. as well as application forms, (c) track the movement and completeness of applications and provide easy feed-back to applicants on the status of their application, (d) communicate more quickly with applicants for supplementary information, modifications, explanations, etc. (e) better internal and faster communications among various units. Such enabling conditions would enable tangible ameliorations in the administrative processing, a goal mandated by the Quebec legislature and the Georgia Department of Natural Resources.

Enablers with Enterprises:

1. Executive Involvement: A taskforce approach, based on matrix management, to prepare application packages for industrial construction and environmental permits – including the involvement of key corporate officials at some stage for review, monitoring and approval-- insures that the company's chances of a rapid positive outcome are far higher.

2. Sense of Urgency: Companies capable of conducting regulatory requirement review and include industrial permitting as an integral part of their pre-investment decision matrix obtain predictable and fast outcomes in industrial permit applications. It is at this stage that the cost of applying and complying is best estimated.

3. Alignment with Strategic Direction: Applicant companies which have defined and implemented corporate strategies on issues relating to community impact assessment, sustainable development, environmental congruence issues, worker safety, consumer protection, pollution, etc. can more readily meet the requirement of industrial permit applications. Additionally, business organizations that are ISO-9000 and ISO-14000 series-compliant at the system-level or are in the process of conforming with ISO norms are far more likely to meet industrial permit requirements in matters of construction permit for capacity expansion, facility modernization, process modification, plant retrofitting and in related air, water, and waste permit permitting. Smaller sized firms have historically been more reluctant to engage in ISO reviews and compliance. Government incentives designed to encourage this process for small and new firms will go a long way to enable these firms to be industrial-permit application ready.

4. Conceptual Framework: While many small and medium-sized most newer companies often have not fine-tuned the corporate goals with management systems, it is a process through which all corporate entities must pass. The ability to craft an effective corporate framework which synchronizes corporate objectives, performance measures, industry and company benchmarks, reward systems has direct implications for a company's ability to deal effectively with externally mandated regulatory requirements.

For industrial permits, the corporate objectives pursued for a particular extension project should reflect what the site, controlling authorities, legislation, and precedents will allow.

5. Communications: Industrial permit applicants are tempted to delegate the process to an external expert consultant. While this approach is often very effective, far superior is a "team" approach involving multidirectional communications among corporate, operational, legal, and financial departments during the application process. It guarantees relatively "problem-free" applications, whether allied to the services of an expert consultant or not. In the Quebec and Georgia sampled cases, the use of external consultants reporting directly to a CEO or project site manager led to less than optimal set of decisions on industrial permit issues. While this may be difficult if the project is a "greenfield" operation with skeletal staff in place, in the case of "brownfield" or expansion, multidirectional communications on the industrial permit process is the best insurer of optimal outcomes.

VI- Conclusions and Recommendations

Industrial permits and authorizations in North America reflect the constitutional, political, and administrative complexities of federal schemes of government. The process of industrial environmental permits is largely within the purview of State or provincial levels of government which implement a mix of federal and subnational legislative and regulatory mandates. Construction or building permit proceedings remain a matter of local jurisdiction with legislative authority delegated by state or provincial government to local units of governments (be they municipalities or counties).

In industrial environmental permits, the process is becoming more streamlined:

*Quebec has regionalized its permit review and issuing process thereby bringing the process closer to industrial sites while retaining a streamlined provincial level operation;

*Quebec has imposed provincial statutory deadlines within which permits must be issued or denied.

*Georgia has streamlined the federal and state permit processes in one single state-level agency.

*Georgia systematically offers all prospective industrial applicants a "new industry team" to review pre-investment industrial projects to determine which permits are needed, what application procedures, and schedules are required and if there are obstacles to permit issuance.

*The use of the internet and sophisticated EDP are becoming more common, though the tracking of the application process leaves a lot to be desired from an information management system standpoint

*A new dramatic trend in the United States, though not implemented in the State of Georgia, is the streamlining of environmental industrial permit procedures through the increased use of general permits and permits-by-rules which reduce time, expense, and complexity related to the preparation and review of a permit application for facilities with substantially similar industrial, remedial, or sanitary processes which pose minimal threat to the environment. Implementing agencies develop requirements for category-specific permits with the federal Environmental Protection Agency and individual

applicants are then able to apply for and be covered by the "umbrella" of the general permit. With certain permits-by-rule, an applicant is deemed to have a permit upon filing specified information with the implementing agency. In other permits-by-rule cases, the applicant is deemed to have a permit when the implementing agency acknowledges receipt of the required information. The State of Virginia's Department of Environmental Quality is a trend setter in this regard (more information at http://www.deq.state.va.us/permits/timefram.html).

For buildings-related permits, similar trends do not prevail and the process remains far more decentralized at the local level and there are noteworthy trends:

*Some politicization of permit application may occur in some local rural communities.

*Economic development agencies appear to be effective facilitators in "opening the door" of local permitting departments.

*Building codes enforced through local governments' zoning and construction permitting may vary from one community to another as there are various national codes from which local communities can choose (in particular in the United States and, to a lesser extent, in Canada).

*The State of Georgia has put in place a unique university-government-industry partnership in providing industrial engineering advisory services to small and medium-sized firms which facilitate permit application and compliance.

*The construction permit process runs on separate procedural and timeline parallel tracks with that of the industrial environmental process. This lack of coordination is a source of frustration and concerns on the part of industrial applicants, in both Quebec and Georgia.

*Some local jurisdictions put in place "electronic checklists" and laid out clear timelines with identifiable sources of contacts for tracking applications and obtaining supplementary information. They are the exception rather than the rule at the local level of permitting.

*It is surprising that authorities do not display a greater spirit of competition for improving local permitting processes given the nature of federalism and the volatile nature of industrial project investment. In part, this may be due to local communities placing greater emphasis on investment incentives rather than regulatory impediments and inefficiencies.

*For local constructions and building related-permits, the concept of "permits-by-rules" or general permits based on a notice of completion does not seem to have been considered.

"Best practices" and various "enabling conditions" were identified for both subnational case studies. A number of recommendations bear noting, based on the earlier analysis:

State and Provincial authorities should harmonize the applicable construction codes on whose basis zoning and construction permitting rules are made and individual cases are adjudicated.

Greater coordination mechanisms between state/provincial environmental permitting authorities and local construction permitting authorities should be achieved through legislative and administrative instruments.

The use of local-state/provincial teams focusing on administrative process reforms of industrial permitting rules

"Permits-by-rules" and general permits should be generalized thereby decreasing permitting regulatory burdens. Classes of firms and industries should be governed by uniform rules.

A more generalized use of mandatory legislative deadlines for permit issuance or denial should be considered.

Pre-investment "industrial" roundtables and "counseling" with the permitting departments should be more readily available at the local level to potential industrial investors considering particular locational choices.

For construction-related permits, legislatively mandating the use of specific national builders' codes, allied with encouragement of ISO certification of contractors and suppliers (not as widespread in the construction trades in North America as it is in Europe), will begin to make it possible to delegate more authority to approved construction companies to grant certificates of completion and compliance.

More continuing education, development of websites, enhanced uses of EDP by local permitting authorities should be encouraged with state and provincial funds.

In rural communities, master zoning and planning needs to be encouraged by state legislation when it does not exist so as to make applicable rules more understandable to outside investors.