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A REVIEW OF LIMITATIONS IMPOSED UPON LOCAL PLANNING  
UNDER ACT 64, THE HAZARDOUS WASTE MANAGEMENT ACT OF MICHIGAN

A paper  
submitted in partial fulfillment  
of the requirements for the degree of

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by

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## INTRODUCTION

Hazardous waste and what to do with it is an important and for some a terrifying subject. As a result of past ignorance or disregard for the public health, safety, and welfare, there are an estimated 15000 orphaned dump sites in the United States. <sup>'1'</sup> These previously unregulated dumps absorbed an estimated 6 billion tons of uncataloged toxic materials since 1950 until legislation was passed to halt unregulated dumping in 1976. Each one is a veritable witches brew of toxins.<sup>'2'</sup> This legacy has only recently been of concern to the public and its government.

It all started with Love Canal, although that catastrophe was not discovered until 1978, two years after the first Federal legislation designed to control toxic wastes was enacted into law. After Love Canal came a long litany of news accounts telling of little known, out of the way places that have become familiar to a national audience. These include places such as Times Beach, Missouri where the Federal government has had to buy a whole town contaminated with dioxin, and Michigan's own Schwartz Creek site near Flint which until clean up

(1) Rankin, Paul Superfund Activity in the Great Lakes ; Great Lakes Waste and Pollution Control Mag. Vol.1, No.2 pg.11; June 1983

(2) Boraiko, Allen Storing Up Trouble: Hazardous Waste National Geographic Mag. Vol. 167, no. 3; pg.319 March 1985

procedures began, was considered the third worst site of toxic chemical contamination in the United States. (Despite these efforts however the groundwater contamination at Schwartz Creek will probably never be alleviated, primarily because the cost of completely purging the aquifer there, if that is even possible, is astronomically high. Homeowners near the dump will probably have to use bottled water as a water supply forever. They have lost all equity in their homes because they cannot sell them. Unlike Love Canal and Times Beach, the Federal government and the State government are not offering to buy these people out.)<sup>(3)</sup>

As a result of these and other catastrophes, the public is afraid of toxic waste and obviously quite hostile toward any suggestions that a toxic waste facility should be built in their community. These people are called NIMBY's in the press for Not In My Backyard. From the brief description given of the insidious nature of old dumpsites, one can see that their fears are not unfounded. It must be remembered however that concern for the environment is only a recent phenomenon. When the original flurry of legislation was passed in the early 1970's there was no thought toward what was to most people an invisible problem; if they were giving much thought to what was going into the ground at all. (One irony of the whole situation was that programs designed to clean the air and water actually contributed an increase in toxic waste going into municipal landfills, where in many cases they caused contamination problems, and to completely unregulated

(3) Nichols, Sue Hazardous Waste a Growing State Problem , Lansing State Journal Feb. 10, 1985 and Karasiewicz, Denise Berlin and Ferro: A Trial of Waiting , Michigan State News March 1, 1985

dumpsites, because materials formerly being wafted in the air or flushed down streams now had to be disposed of on the land.)<sup>(4)</sup> Now, what has been called "An eminently managable problem."<sup>(5)</sup> is vehemently opposed by a public that accepts the presence of solid waste facilities in their communities, that can be much more risky as sources of toxic contaminants than a well engineered Hazardous Waste facility would be.<sup>(6)</sup>

The first legislation dealing with toxic waste was not enacted until 1976. Until that time there was no substance that was legally defined as toxic because of the lack of regulations. This was changed with passage of the Resource Conservation and Recovery Act in 1976. This Federal legislation was designed to regulate wastes being generated from their creation to their final destruction or disposal. But in the case of the old dump sites there was no remedy offered by this new law, for the legislation was not designed to clean up old dump sites, just to regulate currently generated waste. When an alarmed public began to understand the extensive nature and the terrible risks old dumps represented they demanded action. As alluded to earlier, this led to state action in New York to deal with problems such as Love Canal. When it became obvious that the problem was national in scope the Congress passed The Comprehensive Environmental Response, Compensation and Liability Act of 1979 or CERCLA.

(4) Boraiko, Allen Haz. Waste Prob., Nat. Geog. 1985

(5) Greenburg, Michael and Anderson, Richard Hazardous Waste Sites-The Credibility Gap The Center for Urban Policy Research, Rutgers Univ. 1984 pg.33

(6) Boraiko, Allen Nat. Geog. 1985



This is the so-called Superfund legislation. This legislation placed a tax on current producers of toxic wastes and the funds are to be used to clean up these abandoned sites. As of this writing, the fund has been depleted twice and the 2 to 3 billion dollars that had been in it has only helped to remove the imminent hazards from a few dozen of the 2500 sites and to fully purge just 12.<sup>(7)</sup>

Although CERCLA is not directly cogent to the primary theme of this paper, it has been discussed here to illustrate one of the most important aspects of planning for the proper disposal of hazardous waste. With all of the publicity about the abandoned sites; with the inadequacy of Superfund; with an administration in Washington that seems only mildly interested in the problem and which appoints people to be our 'environmental guardians' some of whom have been ousted from their positions in an atmosphere of scandal, the public has no trust in the advocates of modern toxic waste management nor will they believe that new, properly engineered toxic waste landfills are safer than the old dumps.

In Michigan this has led to State legislation that is designed to allow local citizens an unprecedented voice in the decision making process that leads to the acceptance or denial of toxic waste processing facilities and toxic waste landfills. Michigan is one of the top ten generators of hazardous wastes in the United States. The Environmental Protection Agency estimates that Michigan generates 4.6% of the national total.<sup>(8)</sup> In Michigan as in the rest of the nation it became clear that a regulatory framework was necessary to

(7) Rankin, Paul Superfund Act. ; GLWPRMag. June 1983 & Boraiko, Paul Nat. Geog. Mar., 1985

(8) Rankin, Paul GLWPR Mag. June, 1983

prevent the worsening of an already immense problem. This led to passage of the state's Hazardous Waste Management Act in 1979 which took effect after amendment on Jan. 1, 1980. (Administrative Rules were drafted in 1980 and went into effect in April of 1981.) The state Act largely replicates the Federal legislation but the state legislation provides for the input of local citizens through the device of a Site Review Board. The Michigan Dept. of Natural Resources reviews the engineering and environmental safety of a proposed Hazardous Waste Facility, but it is up to the Review Board to look at other aspects of a facility and to utilize input from the public to mitigate the social impacts such a facility will inevitably create.

As representatives of local interests planners would want to be involved in the decision making process for these facilities. Such facilities would produce multiple impacts on the communities they were located in. However Michigan's Act 64 specifically overrides local ordinances; and land use planners, who traditionally have dealt with the problems associated with undesirable but necessary facilities that were to be located in their communities, now have no legal voice concerning Hazardous Waste Facilities.

#### PLANNING AND HAZARDOUS WASTE IN MICHIGAN The Purpose of this Study

The purpose of this study was to discover the state of hazardous waste control and legislation generally, and what role if any planners might have in making the management of these wastes more effective in Michigan. Considering that Act 64 supercedes local ordinances and denies all communities in the state the right to ban hazardous waste

facilitates (Something I did not know when I started the study.), it appears on the surface that they can do nothing. Given the political nature of planning however, there does appear to be a role for planners in the Act 64 process. Whether that is a sufficient role for them will be another point for discussion in this paper.

To understand the evolution of hazardous waste management in Michigan it is necessary to look first at the Federal legislation that spawned Michigan's hazardous waste law. Therefore a brief discussion of RCRA will begin the study, followed by a discussion of Act 64. There will then be a brief look at and an analysis of important court cases that have set precedent under Act 64, and finally the last section of the paper will look at the planner's role under the Act and discuss the efficacy of the Site Review Process.

## PART 1 THE RESOURCE CONSERVATION AND RECOVERY ACT

The primary Federal goal in creating RCRA was to safely dispose of wastes in the least costly way possible. Under both President's Carter and Reagan, Federal pollution control programs must contain the study of the cost/benefit ratio that the legislation will provide. In other words each dollar spent on the prevention of pollution under a law should equal at least one dollar of direct benefit or more. In a balancing of societal interests it is necessary to strike a fair balance among those interests. So then the RCRA was not designed to provide the best protection only, but the economically best as well from the standpoint of the industries which dispose of those wastes. Moreover the current Federal administration has sought to deemphasize

the federal role in Hazardous Waste programs.<sup>'9'</sup> The primary thrust of RCRA is to allow market mechanisms to determine the best solution to the problems of hazardous waste disposal. Following the Federal lead, this model has been adopted in Michigan. Although RCRA lists a hierarchy of preferred methods of waste disposal and treatment, the actual treatments used are dependent more on "... the lowest cost alternative that is technically feasible and reliable and which effectively mitigates and minimizes damages to and provides adequate protection of health, welfare, and the environment."<sup>'10'</sup> This is not necessarily a severe attitude to take. The cost of environmental protection in the 1970's has been estimated to have cost the U.S. economy \$450 billion dollars. The projected price in the 1980's is expected to cost \$690 billion dollars.<sup>'11'</sup> It is a necessity to weigh benefits costs and risks. A review of some of the major litigation involving Federal control of toxic substances in the work place reveals the intent of the government and the courts to balance these factors.<sup>'12'</sup> However according to Greenburg and Anderson, the present emphasis does not fairly balance the protection of the public with the economic interests of waste producers to the long term detriment of Society.<sup>'13'</sup> This will be discussed in the

(9) Greenburg & Anderson Haz. Waste Sites-Cred. Gap 1984, pg.251

(10) Greenburg & Anderson ibid. pg.239

(11) Greenburg & Anderson, ibid. pg.236

(12) Bronstein Daniel & Engelburg Dan Legal Regulation of Toxic Substances: Cases and Readings; Center for Environmental Toxicology, Mich. St Univ. E. Lansing; 1984

(13) Greenburg & Anderson ibid. pg.239



summation of the paper.

RCRA is an extensive document. It was enacted in 1976 to control hazardous wastes which up until then had not been defined. The shortcomings of RCRA in protecting the public from the immediate threat of toxic waste poisoning from orphaned sites soon became apparent and led to the passage of CERCLA in 1980. (See introduction.) The primary goal of RCRA is to replace the poor disposal practices of the past with standardized practices which will reduce the risk of accidental release of hazardous contaminants into the environment. The underlying philosophy of the act is that a "system can be created to develop adequate treatment and disposal capacity, to minimize costs to society, while protecting human health and the environment, to recover materials and energy, and to assign the costs of such a system efficiently and equitably to generators." As stated earlier EPA prioritizes the type of response to waste problems from the most desireable to the least desireable and relies on market mechanisms to choose these and the sites at which waste will be treated and disposed of. In addition the EPA has chosen to allow states to administer their own programs if they are in compliance with RCRA guidelines. The legislation has hoped to be technology forcing in that generators will be innovators in reducing the costs of treatment or disposal for their own benefit, while being forced to adhere to environmentally sound guidelines. Obviously this leads to the possibility that the most economic rather than the most environmentally sound methods of treatment and disposal will be used. The idea is to allow market mechanisms to channel waste to environmentally appropriate sites.

## OVERVIEW OF RCRA

RCRA is composed of eight subtitles. Subtitle C Hazardous Waste Management, and Subtitle D State or Regional Solid Waste Plan at the sections most relevant to planners at the state, county, and local level. These are presented here to illustrate how Michigan's Hazardous Waste Management Act has been affected by this Federal legislation.

Subtitle C This section consists of 11 subsections.

Section 3001--This section defines what hazardous wastes are.

Generally these are wastes because of their extreme flammability, ignitability, corrosivity,

reactivity, toxic or pathogenic characteristics. There are however three primary reasons for excluding wastes from this category.

1. Those that are already regulated such as point discharge sources under the Clean Water Act. 2. Those that are not proven to be harmful such as fly ash residues from power plants. 3. Waste streams that are so complex such as those coming from the nation's households, that are almost humanly impossible to regulate.<sup>(14)</sup> Additionally RCRA exempts small generators which produce less than 1000 kilograms of hazardous waste per month. (The more stringent Michigan regulations exempt only amounts up to 100 kg. per month. California and Florida for example, allow no exemptions.) The exemption rule is criticized because some waste producers simply store their wastes and legally

(14) Boraiko, Allen Haz.Waste.Store.Trouble ; Nat.Geog. Mag. 1985 pg.325

send them to municipal landfills at the rate of 1000 kg. per month. Of course this is much harder to do in states that have more stringent or no exemption requirements.

Section 3002- These are regulations designed to set standards for generators of hazardous waste. This introduces a manifest system which is designed to keep track of the origin and final destination of any substance legally defined as being a hazardous waste; this would include the destruction of such a waste through such means as incineration or its permanent storage in a hazardous waste landfill. The effect in Michigan is that these generators must submit an annual report of their activities since the Federal program is now administered by the State.

Section 3003- This section discusses the standards applicable to the transportation of hazardous waste. The section requires each transporter to:

1. Obtain an EPA identification number prior to accepting any wastes for shipment. However the actual transportation of the waste is regulated by the Dept. of Transportation as specified by the Hazardous Materials Transportation Act of 1978. A transporter may store waste for no more than 10 days.
2. Transporters must comply with the manifest system. Copies of the manifest must accompany the waste except when shipped by rail or by water.
3. In the event of an uncontrolled discharge, a transporter must notify local, state, and federal authorities, and begin immediate clean up of the waste.

Section 3004- This section is intended to control the handling of hazardous wastes at toxic substance disposal facilities. This section also is intended as a technology forcing provision of the legislation. This section requires Federal and State agencies to establish performance standards for facilities that treat store or dispose of hazardous waste as defined by the Act. New facilities had to conform to these new standards. Existing facilities were required to upgrade their facilities to the minimum standards required by the Act on a timetable established by the EPA or the authorized state agency. (This was what was occurring in the Cascade case which is discussed in the Case studies section.) The minimum standards requirements of this section are as follows:

1. The maintenance of records of all hazardous wastes listed under RCRA, which are either treated, stored, or disposed of at a facility.
2. To the satisfaction of the Administrator of the EPA, a generator of wastes, and the facility which accepts them, must comply with the manifest system as described in Sec. 3002.
3. Treatment, storage or disposal of hazardous wastes at facilities using methods satisfactory to the Administrator. The facility must be designed to minimize the possibility of fire, explosion, or unplanned sudden release of toxic material. There must be periodic inspections of the facility to detect any malfunctions and there must be a specific groundwater monitoring program.
4. The design, location, and construction of facilities to the



satisfaction of the Administrator. There are however two restrictions which must be adhered to by every new facility. Facilities built in floodplains must be capable of withstanding the affects of 100 year flood action, and a hazardous waste facility cannot be built on seismically active faults in the earth.

5.The preparation of contingency plans to minimize damage from any accident, leakage, etc., at a facility; personnel must be trained to handle such emergencies. In addition facilities must have security systems designed to keep unauthorized personnel from entering a site.

6.There must by continuity of ownership and operation, and there must be proof of financial responsibility.

Section 3005-This section outlines standares and requirements for the treatment, storage, or disposal of hazardous waste This section allows the Federal government of grant interim status to existing facilities. To gain this status the facility must comply with two criteria:

1. Facility owners, and handlers and transporters of waste must notify the EPA or the authorized state authorities as to the nature of the waste.

2. The application for the interim status facilities had to be filed by November 19,1980.

This section was intended to provide minimum national standards so that existing facilities could have guildelines for upgrading their facilities where necessary. Also it allowed them time to upgrade their facilities to the more stringent standards required of new

facilities.

Section 3006-This section authorized new state hazardous waste programs. It allowed states to assume responsibility for hazardous waste management if the state program adhered to the minimum Federal standards; but allowed the state programs to be more stringent if necessary.

The EPA established a two phased schedule for states to follow:

1. States could apply for interim status when they felt that their program was equivalent to the Federal program. If found to be satisfactory, the state received phase I authorization.
2. Phase 2 authorization allows states to establish their own permit systems in lieu of the federal permit system. (Michigan had to amend its Act 64 regulations in 1981 to come into compliance with RCRA standards to receive phase I approval. Michigan received phase II approval in late 1984.)

Section 3007-This section established the authority for the EPA or the equivalent state program, to inspect the operation of Toxic Substances Disposal Facilities; the facilities of hazardous waste generators, haulers, and transporters.

Section 3008- This section authorizes state programs to suspend or revoke operating permits for non-compliance to the standards. It allows for fines and imprisonment for violations of hazardous waste regulations.

Section 3009- Allows appropriate State programs to assume

implementation of the hazardous waste programs.

Section 3010- This section set timetables for the implementation of the minimum standards. (These dates have now been passed.)

Section 3011- This section authorized financial aid to the states to start their programs.

SUBTITLE D This section consists of 9 subsections.

Section 4001-This subtitle is meant to assist the States or Regional organizations in developing methods of disposing of solid wastes which are environmentally sound and which encourage resource conservation, and to foster a spirit of cooperation between the EPA, the states or regional organizations, local governments, and private industry. (At present the Federal government is not promoting the regional concept of solid or hazardous waste management. Attempts at regional management of hazardous wastes have met little success. <sup>(15)</sup>)

While this subtitle was intended for guiding municipal solid waste disposal, it is presented here because the guidelines are applicable to State or Regional hazardous waste programs as well. However in Michigan the direct outgrowth of this section was Act 641, the Solid Waste Management Act.

(15) Greenburg & Anderson Haz. Waste Sites-Cred. Gap ; Rutgers Univ. 1984, pg.198

Section 4002--This section provides three guidelines for the identification of regions with common solid waste (or hazardous waste) problems.

1. The size and location of areas which should be included.
2. The volume of waste which should be included.
3. The available means of coordinating regional planning with other related regional planning and for the coordination of regional planning with the State plan. State plans are promulgated by the EPA in cooperation with Federal, State, Regional and Local authorities.

These guidelines must consider the following:

- A. The regional, geologic, hydrologic, climatic, and other factors under which various waste disposal practices are required to reasonably protect the quality of ground and surface waters from leachate contamination, runoff contamination; and the reasonable protection of ambient air quality.
- B. The location of facilities for the processing or disposal of waste must take into account the type of waste being handled, and the techniques, practices, and operating methods used in handling the waste.
- C. Methods for closing or upgrading open dumps
- D. Population density, distribution, and projected growth.
- E. The type and location of transportation.
- F. A profile of industries in the area.
- G. The constituents and generation rates of waste.
- H. The political, economic, organizational, financial, and management problems affecting comprehensive waste management.
- I. Types of resource recovery and conservation systems which are appropriate.

J. Available and potential markets for recovered material.

Section 4003- In order for a State plan to be approved it must identify the responsibilities of State, local, and regional authorities in the implementation of the plan, how Federal monies for implementing the plan will be distributed, and how regional and State planning will be coordinated under the plan. It must prohibit the creation of new open dumps and must require that all waste originating in other states except for hazardous waste, must be utilized for resource recovery, disposed of in sanitary landfills or other environmentally acceptable manner.

Section 4004- This section requires the use of sanitary landfills for the disposal of municipal wastes.

Section 4005- This section required that all then existing open dumps had to be upgraded to sanitary landfills or they had to be closed down.

Section 4006- This section required the Governor of each state to identify regions within that state that were appropriate for carrying out regional solid waste management. Additionally a State agency with the assistance of selected local agencies had to implement a plan to accomplish regional solid waste planning. If a viable region was found to cross State boundary lines, the States involved were empowered to create an agency with jurisdiction in both States.

Section 4007- This section empowers the administrator of the EPA to

review State plans and determine whether they are acceptable.

Section 4008- This section provides Federal assistance in setting up solid waste plans in the States.

Section 4009- This provides assistance to rural communities too isolated to be included in a regional solid waste management arrangement.

As stated earlier, Subsection D was not meant to directly address hazardous waste treatment and disposal. However the concept of regional plans to deal with hazardous waste was an option in RCRA and was similar in concept to Subs. D. To date the Federal government and therefore the States have not utilized the concept. From a planning standpoint regional compacts could be efficient because hazardous wastes, especially in large urban agglomerations, do not merely come and go according to State boundaries. By understanding the generation of waste from a regional context it would theoretically be possible to pinpoint where the most suitable sites were in the region for treatment and/or disposal facilities. As in any politically affected situation it may be possible that the best sites could be located in only one State in a regional jurisdiction of say, three. It could then be that State's fate to be a kind of legal dumping ground for more than its fair share of wastes. In a sense this is happening under the free market solution presently in effect. For example much of Michigan's currently generated toxic waste, and all of the wastes removed from old, orphaned, contaminated sites, is disposed of in Ohio. This is not because Ohio is environmentally more suitable than

Michigan, it is merely because Ohio has the hazardous waste landfill space available. As another example, Idaho accepts most of California's PCB's for landfilling because California does not allow PCB's to be landfilled within its borders.<sup>(16)</sup> Not only is there a kind of moral stigma attached to the dumping of one's waste in someone else's backyard but by exporting substantial amounts of waste, a state actually loses large amounts in revenue that would have gone to in-state facility operators.

This overview of RCRA then, is meant to show how Act 64 was shaped in response to the Federal legislation. As in the Federal legislation the Michigan law is dependant upon the hazardous waste treatment and disposal industries to find economically and environmentally sound sites for these problem materials. The Michigan law also has expanded upon the public participation process required by the Federal legislation to create the Site Review Board. This will be examined in the next section of this paper which briefly reviews the portions of Act 64 relevant to the planning process.

## PART 2 AN OVERVIEW OF THE HAZARDOUS WASTE MANAGEMENT ACT (Act 64)

The Hazardous Waste Management Act, Act 64 of the Public Acts of 1979, took effect January 1, 1980. The rules needed to implement the Act however were delayed and took effect April 17, 1981. The Hazardous Waste Management Plan was adopted on Jan. 15, 1982 as required under

(16) Boraiko, Allen Haz. Wastes: Storing Up Trouble ; Nat. Geog. Mag. Mar. 1985, pg.332

Act 64, by the State Natural Resources Commission.

Act 64 is the primary State law dealing with hazardous waste storage, transport and disposal in Michigan. It overlaps to a large extent Federal legislation under the RCRA of 1976. Until late 1983, generators, haulers, and disposers had to meet the requirements of both Acts. Since that time however Michigan has been granted interim approval under RCRA which allows it to administer hazardous waste control programs in the State if minimum Federal guidelines are met.

Act 64 does not regulate the generation of hazardous wastes. It cannot ban or limit the amounts of waste that can be produced. The Act also has no authority to require recycling, reclamation, resource recovery, or other alternatives to landfilling, incineration, underground injection, or land treatment and other methods of disposal. ( In 1981 less than 4% of toxic wastes in the U.S. were recycled. And although two-thirds of all toxic wastes were treated to eliminate or reduce toxicity, the other one-third was disposed of directly into the earth.<sup>'17'</sup> According to Corson and Sobetzer<sup>'18'</sup> the Act can be viewed as having roughly 5 main functions.

1. A tracking system designed to prevent the illegal dumping of

(17) Boraiko, Allen, Nat. Geog. Mag. 1985 ppg. 322

(18) Sobetzer John G. and Corson Lynn A. Hazardous Waste Management in Michigan: A Guide for Local Government and Citizens ; Community Development Programs, Lifelong Education; Michigan State Univ. E. Lansing 1982;pg.2



waste. This requires extensive record keeping by the aforementioned generators, haulers, and disposers of hazardous wastes so that the wastes can be tracked as required by RCRA from "cradle to grave".

2. A permitting and licensing system designed to prevent the improper and unsafe construction, operation, and closure of disposal facilities. This system establishes detailed design and operating standards (For each facility.) that must be met before new facilities are permitted or existing facilities and haulers can be licensed. The DNR issues building permits and licenses, but proposed facilities must also win approval through a Site Review process conducted by a Site Review Board.

3. A siting process designed to provide for the siting of facilities needed to handle the hazardous waste produced. This process is part of the permit system and provides for a Site Review Board that has final authority to approve the application for a construction and operating permit. This process Also provides for the consideration of local concerns and objections and for the integration of local requirements, whenever possible, in any final permit that is issued to a facility developer.

4. A planning process, which is vaguely defined, which may evaluate ways to encourage reduced waste generation and improved siting procedures, and to address any special problems arising from the implementation of Act 64. This plan has been written by a sub-committee of the Natural Resources Commission and was adopted in 1982.

5. An enforcement process and the funds to pay for that process, designed to insure that the program works, or if it fails to, that damage will be kept to a minimum as well as the costs to the public. In addition to civil and criminal penalties, citizen suits are authorized, (Under this Act as well as the Michigan Environmental Protection Act.) imminent and substantial health hazard orders are provided, and a special municipal complaint system is established in the Act. Funds are provided to pay for hazardous waste emergency clean up and for long term care of completed landfills or other types of facilities.

In the same vein, Tomboulion and Tomboulion (19) emphasize the political needs of the State in passing Act 64. There was a need to assure the public that a safe management system for hazardous waste could be created and that there was a siting process that would allow for politically workable solutions on the local level. This is the function of the siting board.

It is parts 3 and 4, and to some extent part 5 of these functions that are of primary concern to local governments and planners. However in part 3 the siting process there is a factor that is

(19) Tomboulion Alice & Paul, Hazardous Waste Siting Response: A Handbook for Michigan Citizens and Local Government ; Michigan Environmental Policy Institute, East Michigan Environmental Action Council; 1983 pg.6

extremely important to locals. Although the Act mandates the consideration of local ordinances, it also expressly states that a Site Review Board is not bound by them. Act 64 takes away all legal control from existing local institutions and invests it in the Board.<sup>(20)</sup> This review then is intended to show some of the more important aspects of Act 64 in general, but specifically it is intended to spotlight those sections of Act 64 most relevant to planners. Some portions of the Act are specifically geared toward the planning process, some portions impinge upon it. It is also implicit that the planning process is not completely ruled out of the Act 64 siting process.

The first step in the creation of a new disposal facility 'in the real world' is the informal review phase. This is a period before any formal submission for a building permit is given by a developer to the DNR. The developer-owner-operator, may choose to contact the DNR, the local governments involved, or any local groups that would have an interest in a hazardous waste facility. A danger of this is that local opposition will mushroom at the outset against a project.<sup>(21)</sup> Ostensibly however, the law is designed

(20) Publication of the Michigan Dept. of Natural Resources Hazardous Waste Management Act, Act 64 of 1979, as amended. From Michigan Compiled laws 1982,pg.13

(21) see Greenburg and Anderson pg.164; also O'Hare, Bacow, & Sanderson Facility Siting and Public Opposition 1983, Van Nostrand Reinhold Co. N.Y., N.Y. pg. 144, and Grabowski, Barbara, Siting of Hazardous Waste Management Facilities under Michigan's Hazardous Waste Management Act: The Case of Sumpter Twp. 1983 Unpublished Master's Thesis, Dept of Resource Development, Michigan St. Univ., E.Lansing pg.69

with a balance between the local government and local interests, and the proposer of the project; in fact the law assumes but does not state, that antagonists in a proposed facility siting will sit down and negotiate before formal site review hearings, and outside of the review hearings when they do occur. It may be to the benefit of the potential applicant to discuss with them the concerns of local groups during this informal period. It could lead to agreements before the formal Review process and so add to the chances of the facility being built.

If the local citizenry are assumed to be hostile by a developer, the developer will most likely seek the other permits needed such as air and water pollution permits or permits to alter or enclose drains before going to the DNR with a building permit proposal. These permits are cheaper and easier to obtain than a Hazardous Waste Facility building permit; and if there is a fear of hostility, obtaining these first, discreetly, would reduce initial outcry against a facility proposal.

From the public's perspective there should be the immediate formation of a local group to investigate not only any application for a construction permit, but the air, water, or any other permits that look 'suspicious' as well. The Act is designed, as stated earlier, to encourage informal negotiation between citizens and a facility developer. So it is in the best interests of any community that suspects they will have a facility proposed for their area to get organized as soon as possible.<sup>(22)</sup> In conjunction with the formation of a citizens group, local government should review and make

(22) Tomboulia & Tomboulia pg. 9

government should review and make revisions in its master plan and zoning ordinances to deal with an impending facility proposal. While an outright ban on a facility by a local ordinance is powerless and illegal, rational suggestions and controls are not. The more cogent any local regulation is, the more likely a Site Review Board will choose to include such regulation in the conditions necessary to obtain an operating permit for a proposed facility.

At this point we have entered the perview of the local planner or perhaps the regional planner. At present there is no official role in the Act for planners who are supposed to be somewhat qualified in helping to shape land use decisions. Even in technically complex problems such as Hazardous Waste Facility siting, the planner should be able to come up with ways to lessen the negative impacts of such a project on an existing matrix of land uses and social emotions. That at present this supposed ability is not utilized will be discussed later in the paper.

In any case Sobetzer and Corson feel that this informal period with its opportunities for negotiation may be very effective in mediating any disputes between a community and a facility developer because both parties feel the pressure to avoid the 'fiat' of the formal review process under the Site Review Board. (23)

#### The Formal Review Process for new Hazardous Waste Facilities

This process begins when the developer of a facility submits an application for a construction permit to the D.N.R.. The D.N.R. must

(23) Sobetzer & Corson, Haz. Waste Mgt. in Mi.: Guide for Local Gvt. & Citizens pg. 11

notify the permanent board members, the municipality, the county, the local soil erosion and sedimentation control agency, any other State agencies that have responsibilities that would involve them in such a facility, the regional planning agency in whose jurisdiction the facility will be located, and any other agencies deemed appropriate, of its receipt of this application. The application must contain the name and residence of the applicant, the location of the proposed facility and any other information deemed necessary. The application must be accompanied by a construction permit application fee. The director of the D.N.R. determines the fee using a sliding scale based on the cost to the Department for reviewing the application. The scale is also based upon the size of the site, its projected waste volume, nature of the waste, hydrogeological characteristics, and the type of facility. The application must include a determination of existing hydrogeological characteristics, and a monitoring program consistent with rules promulgated by the director for groundwater quality standards, an environmental assessment, an engineering plan, and the procedures for closure and postclosure monitoring. The environmental assessment shall include, at a minimum, an evaluation of the proposed facility's impact on the air, water, and other natural resources of the state; and also shall contain an environmental failure mode assessment.<sup>(24)</sup> Under Act 64, the D.N.R. has a maximum of 120 days to review the application. (Although there is no minimum time that the Department must review an application.) If at the end 75 days the application has not been rejected, the D.N.R. must notify the permanent members of the Site Review Board and the public,

(24) Mich. D.N.R.pub., Act 64 pg.10

that it has not rejected the application. (The chairman of the Site Review Board informs the County and Municipality involved that they must appoint 4 members to the S.R.B.) Once this process has been completed, and when the Dept. of Natural Resources finds that all requirements have been met, the application then goes through the Site Review Board Process.

#### The Site Review Board

The Site Review Board is a legal device that is an innovation in Michigan.

As has been indicated, it is designed to balance the interests of the State at large, and the local citizens and government where the proposed facility is to be located. The board consists of 9 members. Five of these positions are considered "permanent" in that they must be filled by persons appointed by the governor that will always have the same expertise. However, the same individuals appointed as permanent members of a specific board must remain members of that board. One must be a geologist and one a chemical engineer. These two positions are filled from a round robin of qualified individuals drawn from the State's University system. The other 3 permanent positions are filled by individuals from the departments of Natural Resources, Public Health, and State Police, respectively. Each member must serve a term on the Review Board for three years. The chairman of the board is always the individual from the Dept. of Natural Resources. The other 4 members of the board are made up of 2 citizens from the municipality where the proposed facility is to be located, and 2 citizens from that respective county where the facility is to be located. The temporary members serve on the board until it accepts a proposed facility or until the construction permit is rejected. Five

members in attendance at a legal meeting of the board constitute a quorum, and the concurrence of 5 members of the board constitutes a legal action of the board.

Once the board has been formed it must arrange for a public hearing to receive public comment about the proposed facility; notice for this meeting must be published no less than 30 days before it is scheduled. The board must at a minimum, consider the following matters:

1. The risk and impact of accident during the transportation of hazardous waste.
2. The risk and the impact of any contamination of surface or groundwater.
3. The risk of fires and explosions.
4. The general impact on the municipality as concerns the public health, safety and welfare; and whether the proposed facility is consistent with local ordinances, permits, or requirements.
5. The probable adverse environmental impacts; how the facility will effect the ecology; scenic, cultural, historic, or recreational amenities, air and water quality, and wildlife.
6. The concerns and objections of the public.
7. Finally if any aspect of the physical or social environment is adversely impacted, the board must evaluate measures devised by the applicant to mitigate these impacts, or mandate them if they are lacking.

While this list seems agreeably succinct it must be emphasized that the board can and will look at any aspect of the project on this list or in any area that it feels should be examined that pertains to the project. Or as one DNR spokesperson has put it the Review Board



"...can do anything they want." (25) Despite the emphasis on these Board review powers, the idea of this paper is to see what planners can contribute to effective waste management in Michigan. One of the primary questions that was asked was if planners had any official role in the process at all. As the next section illustrates they do; and they don't.

#### EXERPTS FROM ACT 64 PERTAINING DIRECTLY TO PLANNING

Act 64 is more than just the Review Board, and a jurisdictional mandate for the State of Michigan. The primary thrust of the document is to allow the developer of a project and the local community; under the aegis of the State, to decide the best way to locate a hazardous waste facility. While environmental concerns must be addressed, the final location decisions are primarily economic as was the intention of RCRA and Act 64. The planning profession is considered in Act 64 however and the following Articles from the Act are the ones that spell out the role of planners in the siting process.

ARTICLE 299.519, Section 19, Subsection 1(a) "Upon receipt of a construction permit application...the director(of the DNR)...shall: Immediately notify...a regional planning agency established by executive directive of the governor; and other appropriate agencies."

ARTICLE 299.520, Section 20, Subsection 7(d) "The impact on the

(25) Personal communication with Mindy Koch, Resource Specialist, Mich.Dept of Nat. Resources on Jan. 28, 1985

municipality (will be considered by the Site Review Board) where the proposed treatment, storage, or disposal facility is to be located in terms of the health, safety, cost, and consistency with local planning and existing development. The board also shall consider local ordinances, permits, or other requirements and their potential relationship to the proposed treatment, storage, or disposal facility." Section 20, Subsection (8) "The board shall consider the concerns and objections submitted by the public. The board shall facilitate efforts to provide that the concerns and objections are mitigated by establishing additional stipulations specifically applicable to the treatment, storage, or disposal facility and operation at that site. The board also shall to the fullest extent practicable integrate by stipulation the provisions of the local ordinances, permits, or requirements."

ARTICLE 299.521, Section 21 "A local ordinance, permit requirement, or other requirement shall not prohibit the construction of a treatment, storage, or disposal facility."

ARTICLE 299.532, Section 32 "A municipality or county shall not prohibit the transportation of hazardous waste through the municipality or county or prevent the ingress and egress into a licensed treatment, storage, or disposal facility."

From the outset then, planners can have an impact on a proposed site by updating or creating a local ordinance(s) that might apply to a hazardous waste facility in the pre-application phase. As Tombouljian points out the legality of an ordinance, or in the case of hazardous

waste facilities the applicability of such an ordinance, is not lessened simply because that ordinance is of recent vintage; as long as the ordinance does not usurp State authority, and can be shown to be reasonable. (26) It would appear then, that while the plans or ordinances that a community enacts to deal with a potential or imminent hazardous waste facility are not binding on the decision made by a Site Review Board, the board must consider these plans and ordinances. It seems then that if communities throughout Michigan were prepared for the possibility of a hazardous waste facility being located near them, they would have a much better chance of controlling the severity of the impact that such a facility could have upon them; it is likely however that not every community in the State would need to do this. The primary reason would be that remote places, those that are very far from sources of hazardous wastes, would not be viable places for facility development because of the transportation costs involved in shipping large quantities of waste there. Another very important reason would be, in the case of hazardous waste landfills the presence of suitable clay soils mandated by Federal and State law to be compacted as liners for the landfill cells. ( Although this soil could be introduced to a site that lacked it, it would still be a major expense to excavate it from one site and move it to the preferred site. It would be much more efficient to find a site where waste could be deposited in situ because of the presence of the prerequisite clay.) A pattern for analysis begins to emerge just from these two needs. Planners could pinpoint the best sites to place hazardous waste landfills based on shipping distances from point of

(26) Tomboulion & Tomboulion pg.32

origin and based on the presence of suitable, compactable clay soil. Of course these are only two of many variables that could be analyzed to determine site suitability. That no program exists statewide to do this is based on the premise that proposers of hazardous waste facilities would do these analyses, and more, to assure acceptance of their development by the Site Review Board overseeing their proposal. It will be seen later in this paper that this is not necessarily so. It will also be put forth that it may not be in the best interests of industry or the citizenry to rely simply on the research of the facility developer in choosing sites for hazardous waste treatment or disposal. Before discussing the merits and problems with the law and in some aspects the accepted methods of hazardous waste disposal, a review of some significant court cases dealing with the power of Act 64 over local ordinances, and a brief review of the Site Review Boards that have convened and their decisions, are in order.

The cases presented represent the first and the current instances of judicial review of the effect of Act 64 on local planning and zoning. A pronounced difficulty to this day in the management of hazardous waste in Michigan, is the tendency for local governments to assume that they can control the operation of a hazardous waste facility within their jurisdictional boundaries.<sup>(27)</sup> Formerly the very act of placing or operating a facility within a political jurisdiction was considered the purview of that local government. The first case presented here is the precedent setting one that nullified that notion in Michigan.

(27) See Appendix A, page 3.

### PART 3 A REVIEW OF PERTINENT LITIGATION AND SIGHT REVIEW DECISIONS

Township of Cascade vs. Cascade Resource Recovery Inc., (118 Mich. App. 560, 325 N.W.2d 500 (1982))

This case represents the confusion that often results when new laws are passed that in a sense go against the grain of established legal methods of land use control. Cascade Resource Recovery (CRR) had sought to establish a facility for the disposal of liquid metallic hydroxide waste generated by metal plating firms in the Grand Rapids area. The initial proposal for the plant was in 1977 before the passage of Act 64, and was subject only to Michigan Public Act 87, the Garbage and Refuse Disposal Act of 1965. While the application for the creation of this plant was still being reviewed by the DNR, the legislature passed Act 641, the Solid Waste Management Act of 1978.

Pursuant to that Act the director of the DNR ordered that the permit be reviewed by the Interdepartmental Environmental Review Committee and the Michigan Environmental Review Board. After review and public hearing the two bodies found the proposed project satisfactory and a building permit was issued by the DNR in September of 1979. When the original application was made under Act 87, local control by ordinance was applicable, so CRR sought a zoning change for the parcel it wanted to build upon from Agriculture to Planned Unit Development. Cascade Twp. had consistently tabled the request until the review of the application by the State was complete. The township never allowed a change in zoning.

Construction of the facility began in March of 1980. However on March 10, the building inspector of Cascade Twp. issued a stop work order to CRR. Subsequently the township commenced a lawsuit against the developer for non-compliance with local zoning ordinances. The

case was dismissed in Oct. 1980 by the district court judge who ruled that Act 641 preempted the local township zoning ordinance, building code provisions, and waste management ordinance. On appeal to the Michigan Court of Appeals the district court was upheld.

This court stated that during all of the review periods under all of the various Acts that this facility was regulated under, it had received permits each time from the State. The court also found that despite the earlier applications, that when Act 64 became effective on January 1, 1980, the facility came within the exclusive purview of Act 64 and that the authority of Act 641 over the proposed facility became inoperative. Therefore it was unnecessary to determine the pre-emption issue, the court said, in relation to Act 641.

The Court relied heavily on criteria for pre-emption set forth by the "Llewellyn Court" ( People vs. Llewellyn, 401 Mich. 314; 257 NW2d 902 (1977), cert. den 435 US 1008 (1978) ), which sets forth guidelines to determine if a "...statutory scheme is occupying the field of regulation.". According to the Court of Appeals opinion, "The four guidelines outlined above (Llewellyn) lead us to conclude that Act 64 occupies the field of hazardous waste management, which plaintiff township seeks to enter, so as to preempt the field." The Court reached this conclusion because "(1) the expressed statutory language indicates that Act 64 pre-emts local ordinances; (2) the comprehensiveness of the statutory scheme shows a pre-emptive intent; (3) the nature of the regulated subject matter demands uniform, statewide treatement." The Court rejected the township's argument that the legislative intent allowed local government regulation short of excluding facilities. The court ruled that Act 64 "expressly provides the State's authority to exclusively regulate the placement,

construction and operations of hazardous waste facilities, to the exclusion of supplementary local ordinances." The court did recognize however that local ordinances under section 20(8) (See Part 3) must be considered when reviewing proposed waste facilities. In summation the Court said, "Michigan is extremely limited in the number of facilities that handle this waste properly. This is due in part because no community wants a hazardous waste facility in their vicinity...The Legislature recognized that hazardous waste disposal areas evoke strong emotions in localities that the decision as to where a landfill should go should not be given to the locality...The legislature, instead, gave the power to a centralized decision-maker (the Site Review Board, and the DNR) who could act uniformly and provide the most effective means of regulating hazardous waste."

Although the case had now been tried in Michigan courts, a local non-profit corporation known as Ada-Cascade Watch sought a reversal of the Appellate court ruling in Federal Court [ Ada-Cascade Watch Co. vs. Cascade Resource Recovery Inc. 720 F.2d 897 (6 Cir. 1983) ] The appellants, Ada-Cascade Watch, asserted that the construction of the facility violated the federal Resource Conservation and Recovery Act. The facility they said, failed to obtain all the necessary state environmental permits prior to November 19, 1980 as required by Act 64. Therefore Cascade Resource Recovery was not an 'existing facility' under Act 64 and therefore could not qualify for interim status under RCRA. However, Cascade Resource Recovery maintained that they had obtained all the necessary permits prior to January 1, 1980. In particular they maintained that the permit they were issued under the Solid Waste Management Act (Act 641) was sufficient for them to construct the facility. After the district court had ruled that CRR

was indeed entitled to interim status under RCRA, and was an existing facility under Act 64; and that Act 64 had occupied the field anyway, Ada-Cascade filed suit in Federal Court.

The Federal Circuit Court remanded the case to the district court with instructions to dismiss the case on the grounds of abstention. This is a little used ruling which in effect is a refusal by the Federal court to make a judgement because it does not wish to interfere with a State's decisions when embryonic regulations are just beginning to be used. In this case the Court did not wish to interfere with a State program that was somewhat confused, but obviously was attempting to sort out the best course to take in the suddenly emerged field of hazardous waste management. Despite the fact that there may have been some clouding of the issues because of the many overlapping laws, and the time span involved, Act 64 emerged as the deciding rule to apply in this case.

Although the supremacy of Act 64 seems to have been established in the creation of new hazardous waste facilities, (Which is most pertinent to this paper since it deals in its final analysis with the planner's role in the creation of new facilities.) the issue of the supremacy of the Act when dealing with interim status facilities was not over with the Cascade case. The next few cases dealing with one proposed facility, illustrate even more fully the confusion that resulted when Act 64 was created, and how passing special legislation to help one facility run the gauntlet of new Federal and State legislation, worked to the detriment of another. It also illustrates the fact that despite the endorsement of a facility by the DNR, despite the fact that the operator is well respected internationally, the material produced inert, the Site Review Board still has the power



of denial over the operation of a facility.

People of the County of Oakland vs. Act 64 Site Approval Board

(Stablex Site Approval Board) No. 83 257831 CE (1983) and Michigan Supreme Court No.s 68386 and 68387, Twp. of Goveland Vs. Jennings and Stablex Corp. vs. DNR (1984)

Here is a chronological review of some of the pertinent decisions and actions leading up to these cases as excerpted from the Michigan Waste Report. (28)

June 1978 - Stablex acquired the option to purchase a 186 acre site with the intent of developing a hazardous waste treatment facility capable of processesing 500,000 tons of inorganic industrial waste over a 15-25 year period.

July 1979 - Gov. Milliken signed Act 64, the Hazardous Waste Management Act, which prohibited a local ordinance from disallowing the construction or operation of a disposal facility.

Jan. 1980 - Act 64 became effective although Administrative rules to implement it were not in effect. Sec. 16 of the Act states that a disposal facility in existence on Jan 1. 1980 shall not be subject to a review of the Site Approval Board.

May 1980 - RCRA regulations went into effect that classified most of

(28) Waste Systems Institute Michigan Waste Report(newsletter)  
3250 Townsend N.E., Grand Rapids, Mi.; Vol.1, No. 11 June 8, 1981  
pg. 81,82, and 83.

the materials proposed for processing by Stablex as hazardous.

April 1980 - Oakland Co. Circuit Court ruled that Stablex is in compliance with a Dec. 1978 consent agreement with Groveland Twp. ( Groveland Twp. vs. Jennings ) for the reclamation of a Gravel Pit on their property with Stablex's Patented "Sealosafe" Material. (This material consists of the non-organic wastes Stablex would have accepted, such as metal sludges, combined with lime for neutralization and a binding material to produce large blocks of inert, concrete-like material.) The consent agreement said the former gravel mining operation was subject to such reasonable regulations as the township might impose by valid ordinances and that the fill had to be non-organic in nature. Stablex was found to be in compliance with the agreement and the township was enjoined from interfering with Stablex's operation.

Summer 1980 - The DNR delayed issuance of construction permits for the project due to the lack of rules under Act 64 and Act 641.

Oct. 1980 - The Cascade case was decided (see first case) which ruled that Act 64 pre-empted the field of hazardous waste regulation.

Nov. 1980 - Stablex sued the DNR to obtain the necessary permits to start construction and to begin operation. The corporation was granted these permits by the Court. On Nov. 19 Stablex was granted interim status under RCRA.

Nov. 19, 1980 - Public Act 301, an amendment to Act 64 went into

effect. It stated that " A disposal facility in existence on Nov. 19, 1980, for which approval of construction has been received from the Air Pollution Control Commission shall not be subject to a review of the Site Approval Board or require a construction permit under this act...this subsection does not abridge or alter the effect of a local ordinance, permit requirement, or other requirement on the construction of a disposal facility...". This amendment was passed for the benefit of the UpJohn Co. which was building an on site incinerator at its plant in Kalamazoo. Unfortunately for Stablex it too came under this amendment.

Nov. 25, 1980 - Treated Stablex material was granted temporary exclusion from RCRA regulation as a hazardous material. The proposed landfill qualified as a solid waste facility and fell under the jurisdiction of Act 641, not Act 64.

April 1981 - Act 64 administrative rules went into effect. An existing facility was defined as one that had received all necessary state issued permits before Jan. 1, 1980. (Stablex had received its Act 641 permit and its air pollution permit in Oct. of 1980.)

May 1981 - The Michigan Court of Appeals reversed the April 1980 Circuit Court ruling, and dissolved the injunction against Groveland Twp.. The Court ruled that although Stablex's reclamation plan may have been in compliance with the consent agreement and the local ordinance in regard to landfilling the mined areas on their property, the agreement forced Stablex to conform to local zoning ordinances which prohibited the construction and operation of a waste processing

plant.

The Court made no reference to State or Federal Hazardous Waste laws or specifically, to the sections of Act 64 or Act 641 relating to the effect of local ordinances, regulations and requirements. Nor did the Court refer to the Circuit Court decision of Oct. 1980 (See previous case) which declared Act 64 superior to local statutes. The court emphasized the fact that the consent judgment had been extensively negotiated and had been agreed upon by Stablex. This seemed to indicate, at least in this case, the viability of local input into the hazardous waste facility siting process. It seems that the court wanted to allow some measure of local input and was not about to deny it in the crossfire of new laws governing the disposal of waste. It seems that if the Act 64 process that allows indirect local participation was not to be invoked by the State, then the judge had to reach back to the original consent agreement to assure that the intent of the law as he saw it; the allowance for local input and consideration of local ordinances and concerns, was justified. Unfortunately the Stablex Corp., which was going to build a seemingly safe facility and landfill, in an area that appeared to be appropriate, lost out.

This lengthy history however merely takes us to the two most recent cases to be considered.

#### Oakland Co. vs. Stablex Site Approval Board

After the defeat in Appeals Court Stablex sought in 1982 to propose a facility on a different parcel of land adjacent to its landfill site. The DNR accepted this as a new facility and after reviewing the new application, okayed it and convened a Site Approval Board to consider the project despite objections from Groveland Twp.

that it was not really a new facility proposal. The Site Approval Board convened in late 1982 but before it could render a decision Groveland Twp. brought suit ( Groveland Twp. vs. DNR, No. 82-252214FY ) claiming that that this convention was improper because it was essentially the same facility as the one denied in 1981 and although on a different site, should not be subject to the Site Approval process. The suit was dismissed because the court deemed that every application for a hazardous waste facility " receive thorough public scrutiny as intended by the legislature " in Act 64.

The Site Board continued to meet, but finding that it needed more time to consider the application, extended its proposed decision date. Hours before the decision was to be made, the Oakland Co. prosecutor filed an injunction to stop the board from doing so on the grounds that the Stablex application did not have a site specific hydrogeological report, that the Board having taken more than 120 days to study the application had lost its jurisdiction to make a finding, and because the Chairman of the Board, Dr. Dennis Tierney, having participated in the initial DNR approval for the construction permit, was unable to fairly and impartially make a judgment.

Although it was obvious that the original application did not contain a proper hydrogeological report (Stablex submitted the report from its previously proposed site which was on a different parcel of ground), the Attorney General had advised the Board to request new test borings at the proposed site rather than reject the application at the first meeting of the Board. The Court castigated the DNR for submitting an application to the Site Review Board that was not complete and which was in flagrant disregard of the Hazardous Waste Management Act. However, that fact did not in of itself divest the

Site Approval Board of the power of review. The court said that "It is the function of the Site Approval Board to determine these deficiencies, as the Site Approval Board in the present case did at or before its first meeting."

What the Court ultimately determined was that despite the obvious blunder of the DNR, and the bad advice the Attorney General gave to the Site Review Board; and the obvious fact that Act 64 does not allow for the amendment of an application once it is presented to the Board. Based upon the Act and the evidence that the Board should reject the proposed facility, the Court could not rule on a potential harm before a harm was done. The court had no authority to restrict the activities of the Site Review Board. (Subsequently the Board denied Stablax an operating permit because the site afforded no natural protection to the aquifer; a sole source aquifer. In part the soils were not impervious to soluble materials and could not effectively be modified to accommodate the possibility of spills and leaks from the processing facility.)

The final case to be presented in this section was a Supreme Court ruling which decided the fate of facilities such as Stablax that were caught in the interim period between no regulation and the adoption of Act 64. What this decision did was to establish the primacy of Act 64 as concerns new facilities that apply for permits from the Dept. of Natural Resources. Additionally the decision established the responsibility of Stablax to adhere to local zoning requirements. The Act 301 "UpJohn amendment" to Act 64 was found to allow the restriction of facilities that chose not to participate in the Site Board Review Process.

### The Michigan Supreme Court decision of 1984

In December of 1984, the Michigan Supreme Court handed down a decision on an appeal by Stablex Corp., of the Oakland County Circuit Court ruling upholding the right of Groveland Twp. to enforce the zoning restrictions concerning Stablex's property there. The Supreme Court held:

" A hazardous waste treatment, storage, or disposal facility which is not subject to a review by the site review board or which does not require a construction permit under the Hazardous Waste Management Act is subject to local ordinances governing land use and construction of such facilities even where an ordinance would preclude construction at a particular site.

1. The Hazardous Waste Management Act, as part of its comprehensive regulatory scheme, provides for the construction of hazardous waste treatment, storage, and disposal facilities. Once a construction permit for such a facility is issued, the act precludes a municipality from applying its ordinances and regulations to prohibit the construction and operation of the facility.

2. Amendment of the act to exempt certain facilities from the act's construction requirements was not intended to relinquish all control over the placement of the facilities. Facilities which qualify for exemption from the requirements of the act are subject to local requirements pertaining to land use and construction of such facilities.

3. Because Stablex is an existing facility within the meaning of the act, and because it did not seek a construction permit or site review board approval and instead availed itself of an exemption from such permit and approval under the act it must comply with all local

ordinances and requirements affecting construction of its proposed facility. Because the proposed facility does not fit within one of the principal or accessory uses permitted by the township zoning ordinance, construction of the facility on the property in question is barred.

4. The trial court concluded that industrial waste processed by Stablex by use of its patented method qualifies as an acceptable fill material for reclamation as set forth in the consent judgment and the ordinance. No evidence was offered on appeal that permits the conclusion that the trial court erred."

Now that all facilities in Michigan have been brought into the Act 64 process or in the case of UpJohn and Stablex, the Act 301 process, and the Site Review Board mechanism firmly established in the law, it is important to find out how the process has worked with new facilities. In this section of the paper, a brief description of the five hazardous waste facilities thus far examined by the Board will be presented. (29)

Thus far six proposals for hazardous waste management facilities have been proposed for Review under the Act 64 siting process.

Midland: The Dow Chemical Co. landfill. This, the first hazardous waste facility to be subject to the Site Review process, was located on the company's own property and was to be used for wastes generated at the Midland plant. The initial Board formed for the Dow facility was disbanded due to a ruling by the Attorney General's office that there was a conflict of interest on the part of two of the local Board

(29) excerpted from Tomboulia & Tomboulia pg.2,  
and Grabowski, Unpublished thesis, Pg.14



members, and the Dept. of Natural Resources Representative, who was at the time the chief officer of the Office of Hazardous Waste Management. The board reconvened, with new local members and DNR representative in June, 1981. The Board ruled to grant the construction permit in Sept., 1981.

Muskegon: BFC Chemicals, Inc. incinerator. This facility was to be used for the destruction of wastes generated during chemical production processes at the plant and was located on site. The Board approved the company's application in Nov., 1981.

Sumpter Twp., Wayne Co.: Environmental Management Systems Inc. landfill. This was the first commercial facility to be reviewed under Act 64. "This facility was proposed by the operator of a solid waste landfill in Sumpter Twp., and was to be located adjacent to that site. The idea of accepting industrial wastes was abhorrant to the local community who did not want to be a 'dumping ground' for toxins. There was also a long standing animosity between the operator and the community in this case because of frequent mishandling of garbage, disregard of the morning and night-time allowable dumping period, and the perception by the predominately black community of prejudice toward them by the landfill's operator.<sup>(30)</sup> The facility was denied by the siting board because the facility would be in violation of Rule 415 of Act 64 by being in contact with groundwater, the facility appeared not to have adequate capacity to store runoff during area flood conditions, the Board did not feel it had time to adequately evaluate the proposal, the applicant had a poor performance

(30) Grabowski, Barbara Unpublished Master's thesis, Dept of Resource Dvlpmnt, Mich. St. Univ. E. Lansing 1983, pg.49

record at the adjacent sanitary landfill, adequate studies of the native base soils were not done, and it was determined by the Board that Sumpter Twp. was too densely populated to accommodate a hazardous landfill. The operating permit was denied October 1982.

Pontiac Twp. Oakland Co.: ERES Corp. incinerator This was a commercial facility designed to accept liquid organic wastes. The facility was denied due to poor design, the fact that the facility was in a heavily populated area, and because of threats to surface and groundwater from improperly controlled emissions. The proponents of this facility were called "amateurish" by one former Board member. (31) The Site Review Board Voted 8 to 1 against it and the permit was denied in December of 1982.

Groveland Twp. Oakland Co.: Stablex Corp. metal sludge treatment plant. This facility was denied in April 1983. (See previous.)

Michigan State University, East Lansing: incinerator. Although this application was submitted in 1982, it has never yet been acted upon by the University by requesting review by the DNR.

The pattern that seems to have resulted from the Act 64 process thus far is the denial by Siting Boards of facilities designed for commercial use that would be 'importing' hazardous wastes, and the allowance of in-house facilities which are on the property of the waste producer and presumably represent a very narrow range of materials that need to be processed or buried. What is also apparent

(31) Remarks made by Dr. Donald Anderson, Chairman, MSU Chemistry Dept., on May 7, 1984 at a seminar offered by the Dept. of Resource entitled Hazardous Waste Management Seminar R.D.880 ; Spring term 1984

but not examined in detail here is the immediate hostility toward hazardous waste facilities by local populations who perceive themselves as sacrifices to society's need to get rid of these wastes. Consequently, local members of Site Review Boards can automatically be assumed to be hostile. As Dr. Donald Anderson a member of the Sumpter Twp.landfill Site Review Board has said, "The Site Review Board is now in fact a 5 member board that must vote unanimously...", if a facility is to be allowed to operate.<sup>(32)</sup> However, this must not be assumed by the record of denial , thus far exhibited. The Siting Board process has not allowed poorly\_planned\_facilities to operate.

Admittedly facilities have been denied that reek of incompetence, such as the ERES incinerator. But how are companies which are reputable, and cognizant of their responsibilities to the community they are proposing to locate in, to breach this wall of local hostility? Should we continue the time and resource consuming practice of scrutinizing a site proposal only to turn down the applicant? This paper approaches these, and other problems of hazardous waste management, as variables that are suitable for examination using the methodology of the planning process.

#### PART 4 THE PLANNER'S ROLE IN THE SITING OF NEW HAZARDOUS WASTE FACILITIES

This section of the paper is concerned with the role that planners are allowed to play in the Act 64 Siting process, what role they could play in that process, and unsurprisingly, what role they

(32) Dr. Donald Anderson, *ibid*.

should play in the siting of hazardous waste facilities in general.

Planning, especially land use planning, is a discipline which seeks at best optimal solutions and minimally (hopefully), acceptable ones. In the physical sense this means deciding what land uses are compatible with each other or what new land uses can be introduced into a community without disrupting its fabric. In the social sense the planner must deal with the emotions of people who, in the United States at least, distrust centralized planning, resent government controls on their individual freedom, and who often reject rational approaches to problem solving even if they agree a problem exists, or who reject planning to the detriment of the community because of their own greed. What this means is that the planner must not only be a 'dreamer' who tries to help create a sane, clean, happy society and a technician who thinks up 'plans', but must also be an arbiter among the various factions that make up a community. Plans must be accepted by a majority of those who will live with them or they will not work. The challenge to the planner is to create plans, perhaps an impossible task, that everyone will accept. Unfortunately for the poor planner this task must be done without violating his or her own ethics, without violating the rational ethic of planning, the law, environmental ethics, etc., etc., etc., ...!!!

#### The present Role of Planners under Act 64

As was alluded to earlier in this paper, under the current regime of Act 64, it is in the best interests of local governments and the citizens of those governments to prepare for hazardous waste facility proposals before they exist. "Communities located near centers of industrial activity should anticipate facility siting proposals. They

will benefit from planning ahead, preparing to take a leadership role in response to any future hazardous waste siting proposal." (33)

This was written for the governments of such communities and citizens groups who may wish to organize to either fight such facility proposals, or to have their concerns and desires considered by the Site Review Board if a project application is submitted. (see Part 2.) In the realm of Planning this would involve the Land Use Plans of the community and the ordinances designed to enforce them.

#### Land Use Plans

Land use plans can be updated to reflect community concerns before hazardous waste facilities are proposed. A plan, although it could not ban the construction of a hazardous waste facility, could contain policy statements and recommendations or constraints that reflect community concerns about them. Plans should seek to keep hazardous waste facilities out of environmentally, socially, or economically sensitive areas. Plans should also contain some indication which areas would be least affected by the development and operation of a facility. It cannot be overemphasized that if a community seeks to exclude facilities totally, it will lose the ability to exclude any site by denying all sites. If criteria for making particular areas or sites unacceptable for hazardous waste facilities were well thought out, and if they do not violate the intentions of Act 64, it is likely that they would be considered important when The Site Review Board is reviewing operating permit applications. Also, if a community has concerns stated beforehand, it

(33) Sobetzer and Corson Haz. Waste Mgt. in Mich.: Guide 1982, pg.52

could be easier for a facility developer to locate a site within a community that is the least objectional and the most advantageous for the developer and the community.

In revising plans the following information, at least, should be included specifically in regard to potential hazardous waste facility siting proposals.

#### Physical Structure of the Community

Soil type and structure (including erodibility, slope, permeability); hydrogeological structure (including subsurface geology and lithology, and the nature of and movement of groundwaters); ecological zones and environmentally sensitive areas and endangered species habitats (including scenic, historical, recreational, and agricultural lands); and other land characteristics. Particular attention should be made in locating, describing and mapping areas near streams, lakes, aquifers, wetlands, wells, and areas with high water tables. Also some idea of air quality should be known.

#### Cultural Constraints

Existing land use patterns, existing zoning patterns, proposed land use constraints, transportation routes.

#### BCRA and RCRA Constraints

- a. active fault zones
- b. regulatory floodways
- c. coastal high hazard areas
- d. 100 and 500 year floodplains
- e. the recharge zone of any sole source aquifer

The plan should also discuss the likely impacts such a facility might

have on the community besides the obvious physical ones. These would include the effect on property values, tax base, potential economic development, sewer and water development needs. Additionally some knowledge of the kind of wastes generated by manufacturers in the area, what kind of disposal or treatment technology would be needed to deal with these wastes, and alternatives to disposal for those wastes, should be investigated.

There is ample precedent to show that community plans that are reasonable are legally defensible. Although a Siting Board is not bound to adhere to such plans, ignoring them could lead to citizen suits against a hazardous waste facility approved without taking them into account.

Although it is primarily the job of the DNR to review the integrity of facility design, it would be in the best interests of the community to have some understanding of this as well, when defining an information base for the plan. Generally, local review should take into account rules 404 and 405 of Act 64 which require all disposal facilities to be located, designed, constructed, and operated in a manner to prevent:

1. Violation of air and water quality laws.
2. Contamination of a sole source aquifer.
3. Exposure of humans or the environment to harmful quantities of hazardous waste.
4. Pollution, impairment, or destruction of the natural resources.
5. Violation of RCRA.
6. Uncontrolled fugitive emissions of hazardous waste.
7. Untreated runoff leaving the active portion of a disposal facility (from the 24-hour 100-year storm. This is what prevented, in part,

the Sumpter Twp. facility from receiving a permit.)

8. Runoff reaching the active portion of a disposal facility from anywhere else (from the 24-hour 100 year storm).

9. Location of disposal facilities in:

- a. An active fault zone
- b. A floodway or floodplain
- c. A coastal high-risk erosion area
- d. A wetland
- e. A sole source aquifer or its recharge area
- f. Within 60 meters of adjacent property lines (Can be greater if designated by DNR.)

Also, Rules 406 to 411, which establish administrative requirements for site security, spill and accident prevention plans, contingency plans and emergency procedures and monitoring plans. Rules 415-429 establish specific facility design standards for each type of disposal facility. The plan should contain as much pertinent information as possible about the community's ability to absorb the impact of a facility. Not only will background data and minimum State and Federal standards be criteria in making a plan, but so should less tangible data such as statements about a community's desired course of future development, rate of growth, desired level of government services, and other "quality of life" goals. As long as these statements are realistic and not written solely to 'ban' a hazardous waste facility, then they would probably be taken into account when a Siting Board decides on the stipulations that a facility must adhere to, to gain an operating permit.

While plans are statements about how a community wants to shape itself based upon its desires, beliefs and the limitations it must



work within, ordinances are meant to enforce these stated goals and objectives. These operating standards desired by a community may be more stringent than those of the State in regard to hazardous waste facilities. A community must be able to justify more stringent standards if a Siting Board is not to consider them arbitrary.

### Ordinances

Since the Site Review Board must consider local ordinances, permits and requirements, it is in the best interests of local governments to upgrade any that may have an effect on Hazardous waste facilities. (See appendix A) These would include the following:

1. General zoning ordinance provisions which apply to all industrial facilities in the community, including:
  - a. Requirements for site plan review
  - b. Performance standards for limiting noise, odor, dust, vibration, and the like
  - c. Requirements for facility ingress and egress, and off-street parking
  - d. Design standards for landscaping, exterior lighting, and business signs.
  - e. Fire control
  - f. Traffic control
2. Special provision ordinances for each likely type of hazardous waste treatment, storage or disposal facility, including:
  - a. Requirements for setbacks and buffer zones (This would include for example, provisions for large lot zoning around facilities near

residential areas to lessen population density)

b. Regulation of hours of operation

c. Requirements for controlled access and warning signs

d. Specific design requirements for the type of facility

3. Construction Code requirements such as building, plumbing, and electrical.

4. Other Construction Ordinances such as grading and paving, water and sewer, wetlands protection, storm water management, and drainage<sup>(34)</sup> As with community plans, ordinances that are reasonable and do not try to exclude hazardous waste facilities obviously or implicitly, have excellent chances of being integrated into a facility's operating permit by the Site Review Board.

#### The Role of Planners as Mediators and Consultants

One aspect of the planner's role that Tombouliau and Tombouliau, and Sobetzer and Corson allude to is that of acting as a consultant to citizens groups that have organized to express their concerns and objections to a waste facility proposed for their

erson, pg. 60 & 64

>) and as the representatives of local programs and citizen interests to the prospective facility owner and/or operator. Although a planner should remain neutral in the negotiation process between local

(34) Sobetzer & Corson, *ibid.*

(35) Tombouliau & Tombouliau, pg. 31, 34 and 35;  
Sobetzer and Corson, pg. 60 & 64

interests and the facility proponent, his or her knowledge of the community could be of benefit to both sides in reaching agreements on the structure and operation of the facility. If the planner can help to forge sensible and relevant agreements, they would probably have a sizable effect on the final decisions of the Siting Review Board.

The planner can also help the community in formulating a consensus of its goals before the negotiations begin and can help in seeking a consensus on the objectives necessary in realizing the goals of the citizenry. This of course would have benefits to the planner in the creation of a section of the community plan dealing with hazardous waste. By direct involvement an accurate appraisal of the community's concerns could be put on paper. Hopefully the planner could act as a level headed advisor to citizens so that unrealistic and unworkable goals and objectives would not be presented to the Siting Board which were doomed to failure, and which could effectively eliminate community participation in the siting process.

Conversely a truly neutral planner could supply a prospective facility developer with information about the community to help in facility design. The planner could also give the developer a good idea of a community's feelings about aspects of the proposed facility and make suggestions about changing those aspects unfavorable to them. This would lessen confrontations during direct negotiations between the developer and the community.

#### Observations and Conclusions

Act 64 leaves little doubt, after the Supreme Court decision in the Stablex case, about the power of local government and therefore planners, to create plans and ordinances to regulate hazardous waste

facility placement. An attempt was made to show what role the planner is allowed to play in the Siting process and it was suggested that planners can function as intermediaries between a developer and a community. (This is actually a role planners have filled in less controversial situations since the profession began.)

What then should planners be allowed to do to improve the siting of hazardous waste facilities? To arrive at a suggestion let us look first at what two planners have to say about the state of hazardous waste site selection planning after RCRA and how they feel it should be changed, and then look at what two acknowledged experts of the Act 64 siting process in Michigan have to say about it.

"In the authors opinion the more prudent approach with respect to siting such potentially noxious facilities, would be to conduct area-wide screening studies to identify candidate areas, and then to perform site-specific evaluations to choose the best suited sites. Pre-screening offers a much better approach to siting hazardous waste facilities that do (other)past practices. The siting protocol and criteria evaluation procedures afford much opportunity to use sound land use planning techniques in facility location decisions." (36)

With this statement Anderson and Greenburg sum up their observations about the state of hazardous waste planning in the U.S. today.

The inherent problem with the initial RCRA legislation which

(36) Greenburg and Anderson, Haz. Waste Sites: Credibility Gap, 1984, pg 240

forced states to adopt corresponding legislation, they feel, is that it relies too heavily on the industry to find 'good' sites without establishing uniform criteria for the way sites should be selected. As stated earlier in this paper, RCRA was designed to provide minimum guidelines so as to assure immediate protection from poor design and practice at new waste facilities. It also was designed to avoid penalizing industry by allowing the most cost-efficient method of waste disposal to be used as long as minimum performance standards were met.

The problem they feel is that by not mandating specific methodologies for the placement of facilities rather than using the developer oriented approach, there is no consistency in the way we site hazardous waste facilities. Corson and Sobetzer stress in Michigan that communities should adopt a specific methodology of their own based on State guidelines, and the advice of their consultants, when deciding the most appropriate sites within their community for facility location. They provided criteria to be used in determining the suitability of sites. They agree with Anderson and Greenburg that this should be done so the community could suggest better alternative sites to a facility developer who may be pushing a site that is not as environmentally sound as those the community had selected.<sup>(37)</sup>

The problem under Act 64 using Greenburg and Anderson's reasoning is that there is no mandate that forces developers or communities to pre-screen for the best facility sites. ("Most approaches are based on an advocacy procedure in which developers propose a specific site

(37) Sobetzer & Corson pg. 71

without serious consideration of whether a generally more suitable area exists." (38) No matter how sincere or dedicated a community is they feel, without uniform, rigorous location standards, and pre-selection of the least disadvantageous sites, the way in which hazardous waste facilities are selected will tend to be inconsistent. Additionally, they feel that without standards that are open to scrutiny time and time again, there is a lack of fairness in the siting process that will not add to public trust in the ability of government to handle the problem.

They specifically suggest using the tool of constraint mapping. This is similar to the now classic work of Ian McHarg, wherein a community's features and physical qualities that would preclude hazardous waste facility development are mapped on a series of overlays. When these are overlapped, areas that have few or no constraints and are most suitable for hazardous waste facility development will appear by a process of elimination based upon predetermined constraints. Such a methodology could be free of political bias if it were structured in such a way to be uniform over an entire state.

It appears that some thought was given to an equitable distribution of sites in the State Hazardous Waste Plan, based on Sec. 9(2)a of Act 64 which states that "the plan shall provide for a reasonable geographic distribution of disposal facilities to meet existing and future needs." The Committee that drafted the plan however felt that there would be no greater environmental protection

(38) Greenburg & Anderson Haz.Waste Sites:Cred.Gap Rutgers Univ. 1984. pg.78

if the State designated appropriate sites than there would be if industry chose sites and then was closely scrutinized by the DNR and the Site Review Board.<sup>(39)</sup> What they may have realized is that pre-selection of sites for controversial projects is politically dangerous.

In short Greenburg and Anderson want sites for facilities selected by using consistent and universally applicable standards before facilities are proposed. This is a rational and equitable basis they feel, for making critical decisions about hazardous waste siting. However, Alice and Paul Tombouljian in 1984, made arguments that go against the more centralized process advocated by Greenburg and Anderson, in support of the Michigan approach to hazardous waste facility siting.<sup>(40)</sup> They point out to detractors of the Michigan system that the failure of the first three commercial sites in the State did not occur just because local citizens were against them, but because the proposers of these facilities had not thoroughly investigated the conditions that existed at these sites, had submitted poor or no engineering plans, and in two of the cases exhibited obvious incompetence based on lack of expertise and poor performance at operating similar facilities in the past. What this

(39) Hazardous Waste Management Planning Committee: Hazardous Waste Management Plan for Michigan, Dept. of Natural Resources, Environmental Services Div. Lansing Mi. 1982, pg. 4

(40) Tombouljian, Paul and Alice, Perspectives on the Feasibility of Hazardous Waste Siting Using the Michigan Approach; Great Lakes Waste and Pollution Review Magazine, Waste Systems Institute, Grand Rapids Michigan; Vol. 2, No. 1, Feb. 1984 pg. 20

team of authors suggests is that it is impossible to make any kind of a proposal without the understanding that no matter how rational it is; well designed, or useful to local industries that the host community may rely on economically, the applicant must demonstrate that the facility is "legal and livable, even if it is not lovable." Siting is as much a political process as a technical one and an applicant cannot expect smooth going at any stage. It is not the lack of specified criteria per se that prevents facilities from being sited but to date, but the reluctance of hazardous waste management firms to accept their responsibility in bargaining with the host community, to be honest about the true need for the facility, to be willing to look at alternative sites when queried by the Siting Board, and to try to generate positive community relations with extensive pre-application planning. And while there appears to be an implicit assumption on Anderson and Greenburg's part that the public is incapable of demanding that extensive criteria be addressed by facility proponents, the Tomboularian's would point to the sophistication of even the embryonic Site Review Board in denying ill-conceived facilities. Could rational planning have made a difference in these cases? Yes, but why should we assume that only the local government should bear the brunt of deciding where the facilities should go by planning for them. It is as much the responsibility of the proponent of such facilities to respect the integrity of the community as it is for the community to prepare for the imposition of a facility that could be a deadly liability for them. Rational planning is not exclusive to local government (obviously) and if hazardous waste management firms are willing to truly engage in it, there appears to be no reason that the Site Review



Board process will not start to recommend applications submitted to it. There is no reason to think that rational planning cannot work on a case by case basis in Michigan.

As long as we as a nation have a policy of stressing landfilling as the primary means to 'dispose' of noxious materials, it will not matter where we site them. They are well engineered (and not so well engineered) future problems that will have to be dealt with by some hapless person (a planner no doubt) eventually. Until that time however it seems wise to me to place facilities under the scrutiny of the Siting Board process here in Michigan so there can be some measure of public input into their location and operation. Planners can contribute to the process by devising good plans of their communities so they can be prepared for potential facilities.

## APPENDIX A

This is the most recent example of only two local ordinances that have been submitted to the D.N.R. for review since the passage of ACT 64.

The ordinance attempts to produce local guidelines to control any hazardous waste facilities that might be constructed within the community.

Its primary weakness lies in the Sec. 5 B(2). Here the township seems to assume it has powers it no longer has available to it under ACT 64. Mindy Koch, who reviewed the document, pointed out to the township that it was questionable as to whether a local permit violation would have any impact on the state permit and license.

(I thank Mindy here for her assistance in providing me with this ordinance. She also supplied me with many other valuable materials.)

TOWNSHIP OF COLUMBUS  
ST. CLAIR COUNTY, MICHIGAN

ORDINANCE NO. 30

AN ORDINANCE TO REGULATE THE DISPOSAL, TREATMENT AND/OR STORAGE OF HAZARDOUS WASTES.

*Township Board and Zoning Board*  
THE TOWNSHIP OF COLUMBUS ORDAINS:

Section 1 - SHORT TITLE

This Ordinance shall be known and may be cited and referred to as the "COLUMBUS TOWNSHIP HAZARDOUS WASTES ORDINANCE".

Section 2 - PURPOSE

The purpose of this Ordinance is to provide for the use of lands for the safe disposal, treatment, and/or storage of hazardous wastes within the Township of Columbus. In recognition of the fact that the promotion of the public health, safety and general welfare of the residents of Columbus Township and the preservation of the Township resources and the prevention of nuisances and hazards require reasonable control of these operations, it is deemed necessary that said operations be regulated and that standards be established wherein procedures permitting said operations are established, operating requirements are set forth, the administration of such standards are provided for, and penalties are provided.

Section 3 - DEFINITIONS

A. BOARD: means the Columbus Township Board.

*Treatment & Storage*  
~~B.~~ BOARD OF APPEALS: means the Columbus Township Zoning Board of Appeals.

C. CELL: means an area of hazardous wastes, segregated by "compatible waste types", and completely enveloped by cover material.

D. COMPATIBLE WASTE TYPES: means wastes which, when in contact with each other, do not pose a threat to human health or the environment greater than existed when they were separate.

E. DISPOSAL FACILITY: means a site or location at which hazardous waste is intentionally placed into or on any land or water and at which hazardous waste will remain after closure.

F. DISPOSAL: means the discharge, deposit, injection, dumping, spilling, leaking, or placing of a hazardous waste into or on land or water in a manner that the hazardous waste or a constituent of the hazardous waste may enter the environment, or be emitted into the air, or discharged into the ground or surface water.

G. FLOOD PLAIN: means that area of land adjoining a river or stream which will be inundated by a 100-year flood.

*Water found below the land surface*

- H. **GROUND WATER:** means any water found under the surface of the earth. ✓
- I. **HAZARDOUS WASTE:** means wastes or a combination of waste and other discarded material including solid, liquid, semi-solid, or contained gaseous material which because of its quantity, quality, concentration, or physical, chemical, or infectious characteristics may cause or significantly contribute to an increase in mortality or increase in serious irreversible illness, or pose a substantial present or potential hazard to human health or the environment if improperly treated, stored, transported, disposed of, or otherwise managed. Hazardous waste also includes all material defined by rule promulgated pursuant to Act No. 64 of the Public Acts of 1979, as amended.
- J. **LEACHATE:** means fluid that has percolated through hazardous waste and which contains contaminants consisting of dissolved or suspended materials, chemicals and microbial waste products from the hazardous waste.
- K. **LANDFILL:** means a disposal facility or part of a facility where hazardous waste is placed in or on land and which is not a land treatment facility, a surface impoundment, or an injection well.
- L. **LIFT:** means a layer of cells which raise the ground elevation to an approximately common level.
- M. **PERSON:** means any individual, partnership, corporation, association, institution, cooperative enterprise, municipality, the State commission, political subdivision of the State, federal agency, any interstate body, or other duly established legal entity.
- N. **SITE:** means a parcel or unit of land.
- O. **STORAGE:** means the containment of hazardous waste, either on a temporary basis or for a period of years, in a manner so as not to constitute disposal of the hazardous waste. ✓
- P. **SURFACE WATERS:** means water occurring generally on the surface of the earth.
- Q. **TREATMENT:** means any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste, or so as to render the waste nonhazardous or less hazardous, safer to transport, store, or dispose of, amenable to recovery, amenable to storage, or reduced in volume.
- R. **WATERCOURSE:** means any natural or artificial channel or depression in the surface of the earth that provides a course for water flowing either continuously or intermittently.
- S. **WETLAND:** means land which is characterized by the presense of water at a frequently and duration sufficient to support, and that under normal circumstances does support, wetland vegetation or aquatic life and which is commonly referred to as a "bog", "swamp" or "marsh".

#### Section 4 - RULES AND REGULATIONS ADOPTED

It is hereby adopted by reference to the rules and regulations of the various agencies of the State of Michigan promulgated pursuant to statutes applicable to environmental concerns. The rules and regulations specifically adopted are as follows:

A. Promulgated pursuant to Act No. 64 of the Public Acts of 1979 and published in the Quarterly Supplement No. 6 of August 15, 1981 to the Michigan Administrative Code of 1979, being rules 299.6101 through 299.7305 inclusive.

B. Promulgated pursuant to Act No. 641 of the Public Acts of 1978 published in the Supplement to the Michigan Administrative Code of 1979 being rules 299.401 et seq.

C. Promulgated pursuant to Act No. 245 of the Public Acts of 1929 and published in the Michigan Administrative Code of 1979, being rules 323.1001 through 323.2160 inclusive of the Water Resources Commission.

D. Promulgated pursuant to Act No. 348 of the Public Acts of 1965 and published in the Michigan Administrative Code of 1979, being rules 336.11 through 336.147 inclusive of the Air Pollution Control Commission.

*Reference* E. Promulgated pursuant to Act No. 127 of the Public Acts of 1970.

F. The General Rules of the Michigan Water Resources Commission, Part 22 Groundwater Quality, which became effective August 29, 1980.

#### Section 5 - PERMITS, PROCEDURE, GRANTING AND REVOCATION OF PERMITS

A. ADMINISTRATION: The Township Board shall grant permits and do all other acts authorized herein.

B. ENFORCEMENT:

(1) Agency. This Ordinance shall be enforced by the Township Board and/or any agent appointed by the Township Board.

(2) Inspections. By accepting a Permit issued under this Ordinance, the Owner and/or operator of any operation shall be presumed to have consented to regular and routine inspections of the property. Said consent shall be authority to go on to any property under Permit for purposes of any inspection. Upon prima facie violation of this Ordinance, the Township Board may revoke said Permit pursuant to its police powers and consistent with the Administrative Procedures Act, and either party may request and be granted thereafter a Public Hearing on said Permit revocation. ✓

C. PERMIT

*Eliminate permit*

*Make it*

*to be renewed by Township*

- (1) Requirement Established. From and after the effective date of this Ordinance, no person shall operate a hazardous waste facility in Columbus Township except in accordance with a Permit issued by the Township Board, pursuant to the authority of this Ordinance.

(2) Issuance Procedure.

- 1) Full names and addresses of all parties of interest in said premises setting forth their legal interest. Proof of said legal interest shall be provided;
- 2) A detailed and full legal description of the premises wherein the operations are proposed shall be provided;
- 3) Topographical survey map at a scale of one (1) inch equals one hundred (100) feet, showing existing and proposed grades on a two (2) foot contour interval. Said grades shall be prepared and sealed by a Civil Engineer or Land Surveyor, registered as such by the State of Michigan;
- 4) A statement and calculations by a Registered Civil Engineer or Land Surveyor as to the cubic yards of the fill material to be deposited and a detailed statement and engineering plan as to how the filling is to be accomplished;
- 5) Detailed engineering plan which identifies all types of materials to be deposited for fill, an indication of specific places on the property where the fill is to be placed, a detailed statement as to the methods of operation, the type of machinery or equipment to be used, and the estimated period of time that such operations shall cover;
- 6) Statement of similar operations carried on by the applicant, including location by municipality;
- 7) The type and daily number of vehicles to be used in the proposed operations;
- 8) Identification of access roads, on-site roads, a drainage plan that identifies grades for proper drainage and any special draining devices, if necessary, fencing, any structures on site existing or proposed, existing and proposed utilities, and any explanation of any on-site testing or other reliable survey data, including, but not limited to, soil surveys, water tables and identification and evaluation of subsurface characteristics;
- 9) Presentation of an Impact Statement which includes an evaluation of the social and ecological environment in and around the site. The following items must be addressed as well as any other characteristics unique to the site or area.

**C. PERMIT (Cont'd.)**

**(2) Issuance Procedure (Cont'd.)**

**Application (Cont'd.)**

**a) Impact on the natural environment**

1. Inventory and describe the existing vegetation and wildlife found on the site. To what extent will they be permanently impaired or eliminated as a result of the proposed operations?
2. Will the proposed operations alter the existing drainage patterns of the area surrounding the site?
3. What effect will the operation have on the quantity and quality of groundwater in the area? What steps will be taken to protect wells on adjacent property?
4. How will the proposed operations affect air quality in the surrounding area?
5. What noise levels will result from the proposed operations, and what steps will be taken to limit noise?
6. What natural features, such as unique topography, mature trees, natural streams, marshlands, swamps and the like, will be destroyed by the proposed operations?
7. How will the proposed operations affect soil stability in the area?
8. Are there potential historic or archaeological characteristics that may be destroyed?
9. Identify flood plains and the 100-year flood elevation.

**b) Impact on the social environment**

1. How will the proposed operation affect the physical and cultural attractiveness of the surrounding area?
2. What impact will the proposal have on landmarks and aesthetic views in the area?
3. Will the proposed operations create a nuisance for residents in the area?
4. What impact will the proposal have on neighborhood character and privacy in the area?
5. How will the operation affect property values and the quality of housing in the adjoining areas?

**c) Economic impact**

1. Will the proposal increase employment in the Township or the County?
2. How does the petitioner's past performance indicate financial stability and ensure completion of the proposed project?

**C. PERMIT (Cont'd.)**

**(2) Issuance Procedure (Cont'd.)**

**Application - 9) (Cont'd.)**

**c) Economic impact (Cont'd.)**

3. Will the proposed operations impair the economic growth of any existing land uses?
4. Will the proposed operations impair the usefulness of adjoining properties?

**d) Public service impact**

1. What additional public services, such as police and fire protection, will be required as a result of the proposal?
2. What impact will the proposal have on local tax revenues?
3. Will the proposal significantly increase traffic congestion in the area?
4. What effect will the truck traffic have on road conditions over the proposed haul route?
5. Will the proposed haul route impact any other municipalities other than Columbus Township?

The above required information is to be provided in sufficient detail to allow the Township to systematically and thoroughly evaluate the potential impact of the proposed operations on the surrounding area and the community as a whole.

- 10) (a) A sworn statement and site plan which specifies in detail the proposed use of the land after closure. The final grades presented shall be consistent with the purposes for the property after completion of operation.

- (b) Application Attachments. Applications for a Permit to operate a hazardous waste facility shall contain or be accompanied by the following information:

- 1) Design plans prepared by a Civil Engineer and a Chemical Engineer and bearing the signature and seal as professional engineers registered in the State of Michigan.
- 2) Background data, including the following:
  - a) Present and estimated service area, particularly areas outside the State of Michigan.
  - b) Estimated daily quantities to be disposed, handled, treated, or transported, by type.



C. PERMIT (Cont'd.)

(2) Issuance Procedure (Cont'd.)

(b) Application Attachments (Cont'd.)

2) Background data,

- Anticipated weight and volume of all non-hazardous wastes to be disposed of.
- Inventory control plan showing proposed location of various types of hazardous wastes, separated for future re-cycling.
- 3) Maps, in the number prescribed by the Township, drawn to the scale of one hundred (100) feet equals one inch or larger and with two (2) foot contour intervals. Maps shall include as a minimum the following information:
- a) Property boundaries and boundaries of areas to be filled. Also show boundaries of all contiguous properties and names of owners.
  - b) Access road location.
  - c) Proposed traffic patterns.
  - d) Location of fencing.
  - e) Location of weighing facilities.
  - f) Location of existing and proposed utilities.
  - g) Indication of use of adjoining land and buildings.
  - h) Borrow and soil storage areas for cover material.
  - i) Location of public and private water supplies, wells, springs, swamps or other bodies of water within one-half (1/2) of a mile of the proposed disposal facility site property lines.
  - j) Location of gas and oil wells.
  - k) Location of high-tension power line rights-of-way.
  - l) Location of fuel transmission pipeline rights-of-way.
  - m) Location of mining operations within one-half (1/2) of a mile of property lines of the proposed disposal facility.

C. PERMIT (Cont'd.)

(2) Issuance Procedure (Cont'd.)

(b) Application Attachments (Cont'd.)

4) Design Plans

- a) A plan of operations shall be prepared which can be easily interpreted and submitted to the Township. Said plan shall be specific as to areas to be filled, schedule of filling, site preparations, source and types of materials to be used as cover.
- b) The plan should include details relative to:
  - 1. Compaction of solid wastes;
  - 2. Application of daily cover material;
  - 3. Elevation and grade of final cover;
  - 4. Linear construction;
  - 5. Leachate collection treatment and recirculation or disposal;
  - 6. Management of ground water;
  - 7. Management of surface water;
  - 8. Erosion control;
  - 9. Revegetation procedures to be used;
  - 10. Typical cross-sections of lifts, dimensions and elevations of the base lifts.
  - 11. Grades required for proper drainage of lifts;
  - 12. Decomposition gas control measures;
  - 13. Location, grades, erosion control measures, and maximum height of, cover material stockpiles;
  - 14. Site security measures proposed, including personnel, methods of surveillance, type of perimeter alarm system proposed, and the like;
  - 15. Evacuation Plan;
  - 16. Medical Emergency Plan;
  - 17. Fire Emergency Plan;

**C. PERMIT (Cont'd.)**

**(2) Issuance Procedure (Cont'd.)**

**(b) Application Attachments (Cont'd.)**

**4) Design Plans**

**b)**

**18. Restoration Plan for Landfills;**

**19. Post Operational Surveillance Plan;**

**20. Emergency Plan to contain spills or leachate on site.**

**5) Hydrogeologic Investigation and Report - a hydrogeologic report and monitoring program which is in compliance with the current standards of the State of Michigan and its agencies shall be provided.**

**D. SUPPLEMENTAL INFORMATION.** Such other information and material as the Township Board shall require.

**E. FEES AND/OR COSTS.** An applicant for a Permit shall deposit such fees and/or costs as are required by Resolution of the Township Board.

**F. BASIS FOR ISSUANCE.** The Township Board shall authorize the issuance of a Permit only if it finds that the granting of said Permit will:

- (1) Not be injurious to the public health, safety and welfare of the Township and its residents;**
- (2) There has been compliance with all the requirements and standards of this Ordinance, and the other applicable Codes and Ordinances of the Township;**
- (3) The proposed operation will not create an unreasonable hazard, annoyance or inconvenience to the owners or occupants of nearby property;**
- (4) Will not significantly change the character of the neighborhood or unreasonably reduce the value of nearby property;**
- (5) And will not create any significant obstacle to the implementation of the Master Plan of the Township.**

**G. DURATION, EXPIRATION AND RENEWAL.** After approval of the facility by the Township Board, the Board shall issue a Permit for a period of up to one (1) year, expiring on August 31 of each year, and renewable annually for a year or less by the Township Board without further Public Hearing.

*review for*

#### **H. CONDITIONS**

- (1) Necessity.** The Township may attach such conditions to the granting of the Permit under this Section which it may find necessary to insure that the intent and purpose of this Ordinance is in all respects observed.
- (2) Violation.** Any violation of a condition(s) included in the Permit shall be construed as a violation of this Ordinance and shall give rise to the penalties provided in this Ordinance and shall be grounds for revoking the Permit.

#### **I. REVOCATION**

- (1) Notice of Violation.** The Township Board shall notify the owner and operator of any violation of the Permit and/or this Ordinance.
- (2) Failure to Abate Violation.** Upon failure of the owner and/or operator to abate said violation within twenty-four (24) hours of delivery of said notice, said operation site may be summarily closed, and the Permit therefore suspended or revoked, and the Township Board shall resort to the bond for restoration.
- (3) Hearing Request.** Any owner and/or operator aggrieved of any notice sent pursuant to this sub-section, may request a Hearing before the Township Board, if the request is in writing and delivered to the Township. The request shall set forth why the operation site should not be summarily closed, the Permit suspended or revoked, and resort had to the bond.
- (4) Action Pending Hearing.** In any case, if the Township Board determines the operation of the hazardous waste facility would be detrimental to the health and/or safety of persons and/or property, the Board may summarily, and without twenty-four (24) hours notice, suspend or revoke the Permit but shall grant a Hearing upon request as provided herein.
- (5) Hearing.** If a request for a Hearing is received, the Township Board shall hold a Hearing within seven (7) days and may, after the Hearing, continue the suspension or revocation of the Permit, or take such other action as appears appropriate under the circumstances.

- J. DESIGN PLAN CHANGES.** The permittee shall submit a written request to the Township Board for approval of changes to the original plans, specifications, reports and methods of operation submitted with a Permit application. No such change shall be initiated until the written approval of the Township Board has been obtained.

## **Section 6 - PERFORMANCE BOND AND INSURANCE REQUIREMENTS**

### **A. PERFORMANCE BOND**

(1) **Requirement Established.** The applicant shall post a performance bond in the form of cash, a bank letter of credit or, at the discretion of the Township Board, a surety bond or some other security satisfactory to the Board, naming the Township of Columbus as the Beneficiary thereof, in an amount determined by the Board to be reasonably necessary to insure compliance hereunder.

#### **(2) Conditions of Bond.**

(a) **Guarantee Compliance.** Bonds shall guarantee compliance with this Ordinance, the Permit requirements and conditions, and that the operation will be carried out according to the approved plans and specifications.

(b) **Forfeiture of Bond.** Upon failure of timely compliance with the requirements of the bond guarantees, the Township may use the bond proceeds to the extent necessary to accomplish such requirements.

**B. NON-COMPLIANCE ENFORCEMENT.** The filing of an application will be deemed to grant a license to the Township and its agents to go upon a property under Permit to use the bond proceeds for the purposes by the bond, where there has been non-compliance.

### **C. ESTABLISHING AMOUNT**

(1) **Consideration.** In fixing the amount of such bond, the Township Board shall take into account:

(a) The size and scope of the proposed operation,

(b) Current prevailing cost of rehabilitating the premises upon default of the operator,

(c) Other such conditions and factors as might be relevant in determining the sum reasonable in light of all facts and circumstances surrounding each application.

(2) **Minimum Amount.** In no case will the sum of the performance bond be less than Ten Thousand Dollars (\$10,000.00) for each acre or fraction thereof of land to be covered by the Permit.

**D. NOTICE OF LAPSE.** The applicant shall provide proof that the Township will be notified in the event of any lapse in the effectiveness of the bond.

**E. REDUCTION OF BOND.** For each acre restored and reclaimed in accordance herewith, or otherwise, said bond may be reduced pro-rata as determined by the Township Board.

## **F. ENVIRONMENTAL IMPAIRMENT/GENERAL LIABILITY INSURANCE**

- (1) Requirement Established.** The applicant shall secure and file with the Township Clerk certifications of proof of insurance, insuring the Applicant, his employees and/or agents or representatives, and the Township for general comprehensive liability in an amount of at least One Million Dollars (\$1,000,000.00) per person and Five Million Dollars (\$5,000,000.00) per occurrence. Said insurance policy shall include coverage for environmental impairment.
- (2) Notice of Discontinuance.** The certifications or renewals thereof shall provide that the Township shall be notified in writing ten (10) days prior to discontinuance or alteration of any such insurance coverage for any reason.

## **Section 7 - PERFORMANCE STANDARDS**

No hazardous waste facility is permitted within the Township unless said operations are in compliance with the current standards of the State of Michigan and its agencies and shall comply with the following:

- A. SOUND.** The pressure levels of sounds shall not exceed the following decibel levels when adjacent to the following types of uses:

Sound Level	Adjacent Use	Where Measured
40 dBA	Open Space/Recreation	Common Property Line
40 dBA	Residential	Common Property Line
40 dBA	Agriculture	Common Property Line
60 dBA	Commercial	Common Property Line
75 dBA	Industrial & Other	Common Property Line

The sound levels shall be measured using a weighted decibel measurement (referenced to 20 micropascals) and with a type of audio output meter approved by the U.S. Bureau of Standards. Objectionable noises due to intermittance, beat, frequency, or shrillness, shall be muffled so as not to become a nuisance to adjacent uses.

- B. VIBRATIONS.** All machinery shall be so mounted and operated as to prevent transmission of ground vibration exceeding a displacement of 0.003 of one inch measured at any property line of its source.
- C. ODORS.** The emission of noxious, odorous matter in such quantities as to be readily detectable at any point along lot lines, when diluted in the ratio of one volume of odorous air to four or more volumes of clean air, or as to produce a public nuisance or hazard beyond lot lines, is prohibited.
- D. GASES.** The escape of or emission of any gas so as to be injurious, destructive or explosive shall be unlawful and may be summarily caused to be abated.

E. GLARE OR HEAT. Any operation producing intense glare or heat shall be performed within an enclosure so as to completely obscure and shield such operation from direct view from any point along the lot line, except during the period of construction of the facilities to be used and occupied.

F. LIGHT. Exterior lighting shall be so installed that the surface of the source of light shall not be visible from any bedroom window, and shall be so arranged as far as practical to reflect light away from any residential use, and in no case shall more than one foot candle power of light cross a lot line five (5) feet above the ground in a residential district.

G. SMOKE, DUST, DIRT AND FLY ASH. It shall be unlawful to discharge into the atmosphere from any single source of emission whatsoever any air contaminants for a period or periods aggregating more than four (4) minutes in any one-half (1/2) hour which are:

(1) As dark or darker in shade as that designated as No. 2 on the Ringelmann Chart as published by United States Bureau of Mines, which is hereby made a part of this Ordinance. However, the Umbrascope reading of smoke densities may be used when correlated with the Ringelmann Chart. A Ringelmann Chart shall be on file in the office of the Building Department.

(2) Of such opacity as to obscure an observer's view to a degree equal to or greater than the smoke described in (1) above, except when the emission consists only of water vapor. The quantity of gas-borne or air-borne solids shall not exceed 0.20 grains per cubic foot of the carrying medium at a temperature of five hundred (500) degrees Fahrenheit.

H. DRIFTED AND BLOWN MATERIAL. The drifting or air-borne transmission beyond the property line of dust, particles of debris from any open stockpile, working areas or unplanted areas, shall be unlawful and may be summarily caused to be abated.

I. ROADS. Roads on landfill and soil excavation sites shall be designed and constructed so that traffic will flow smoothly and will not be interrupted by inclement weather. All roads to the site shall be paved which are used by vehicles and/or equipment traveling to or from the site, and all roads on site, shall not be used unless they are treated by sufficient oil, water and/or chemical substance, whichever would be appropriate for the surface, and frequent enough so that they are dust free whenever used by vehicles and/or equipment. Roads on site shall mean roads designated on approved plans, and such other areas used by vehicles and/or equipment for travel on a regular basis.

- J. MUD, DIRT, CLAY, ETC., ON PUBLIC ROADS. The owner and/or Permit holder of any site where there is soil removal and/or any filling, shall take whatever steps are necessary to avoid any motor vehicle carrying or tracking onto any public right-of-way from the site, any mud, dirt, clay, refuse, etc. If mud, dirt, clay, refuse, etc., is carried or tracked onto a public right-of-way, and it does, or might constitute a nuisance or hazard to public safety, the owner and/or Permit holder shall clean the said right-of-way after the end of any working day. If notified during a working day by the Township of a condition which requires cleaning, the matter shall be taken care of within one (1) hour. If a nuisance or hazardous condition is left after a working day, or not cleaned up within the one (1) hour after receiving a request from the Township, the Township may issue a Citation for the violation of this Section due to the allowance of said condition to remain on the highway, and/or clean the right-of-way, and charge the owner and/or Permit holder with the cost thereof, which may be collected in any court having general jurisdiction.
- K. HOURS OF OPERATION. Operations shall be limited to daylight hours only, between 7:00 a.m. to 7:00 p.m. unless otherwise specified by the Board. No operation shall be permitted on Sundays and Legal Holidays. In emergency situations this time period may be modified by the Township Board provided such emergency order shall not be effective for more than 72 hours.
- L. DRAINAGE. Natural drainage shall not be blocked or diverted in such a manner as to cause the natural water flow to back up onto adjacent property, or to flow in a different course upon leaving the property upon which the blocking or diversion occurs, unless an application is made and a Permit is issued by the Building Department pursuant to plans which provide for a drainage flow which will not be detrimental to surrounding properties.
- M. FLOOD PLAIN, WATERCOURSE AND WETLANDS. There shall be no excavation, soil removal, filling or depositing of hazardous waste materials in any flood plain, watercourse and/or wetlands.
- N. RADIOACTIVE MATERIALS. The disposal of radioactive materials shall be prohibited in the Township of Columbus. ✓
- O. SOIL EROSION. If a Soil Erosion Permit is required by Act 347 of the Public Acts of 1974 of the State of Michigan, as amended, no operation shall take place until a permit has been obtained. There shall be compliance at all times with the requirement of the Soil Erosion Permit.

#### **Section 8 - REQUIREMENTS FOR HAZARDOUS WASTE FACILITIES**

- A. GENERAL. Hazardous waste facilities, consistent with the provisions of this Ordinance, may be permitted in Columbus Township so as to provide an engineered method of disposal, treatment, and/or handling of hazardous wastes without creating unreasonable environmental hazards. Planning, design, and operation of hazardous waste facilities shall be based on empirically derived data and state-of-the-art technology. Secondary containment, leachate collection and treatment systems, and failure detection systems shall be incorporated into the design and operation of hazardous waste facilities.



Section 8 - REQUIREMENTS FOR HAZARDOUS WASTE FACILITIES (Cont'd.)

- B. LOCATIONS. Hazardous waste facilities shall be prohibited in any district other than the Light Industrial and/or Agricultural District.
- C. SETBACKS. No hazardous waste facility shall be operated within one thousand (1,000) feet of any adjacent residentially zoned district or existing single family dwelling, ~~unless otherwise approved by the Township Board.~~
- D. SECURITY FENCES. All hazardous waste facilities shall be completely surrounded by a minimum six (6) foot high, chain link fence or other non-climbable fence, complete with at least three strands of barded wire at the top and locked security gates.
- E. PERIMETER ALARM. A perimeter alarm system shall be installed capable of alerting the operator and his security personnel to any unauthorized entry to the site, at any point along its perimeter.
- F. 24-HOUR SURVEILLANCE. The operator shall maintain 24-hour surveillance of the hazardous waste facility by trained, security personnel.
- G. SUPERVISION. Unloading of hazardous wastes shall be continuously supervised and access to the site shall be limited to daylight hours when a supervisor is on duty.
- H. INVENTORY. A complete inventory shall be maintained of wastes disposed of on-site. In order to facilitate future re-cycling, wastes shall be separated and disposed of by compatible type. A complete copy of the wastes disposed of since the last inventory shall be provided to the Township every six (6) months within 10 days of June 30th and December 31st each year.
- I. TYPES OF WASTES. Prior to the issuance of a Permit, the applicant shall file with the Township Board a schedule listing those items which are to be processed for disposal at the facility. The schedule of items to be processed or disposed of or stored at the facility may not be added to, or altered, without prior notification to the Township Board.
- J. TRANSPORTATION ROUTES. The applicant shall file with the Township Board for approval the proposed route to be used by vehicles as they proceed in and through the Township. The proposed route shall be the shortest route over section line roads and major thoroughfares as may be possible and shall not be on gravel or unpaved roads except as necessary to reach said roads or thoroughfares and the point of destination.
- K. SCHEDULE OF OPERATIONS. The applicant shall file with the Township Board for approval a proposed schedule of operations indicating times during which deliveries shall be accepted and removals conducted, facilities shall be operated, and other on site mobile equipment operated. The schedule of operations shall not cause unreasonable safety hazards, traffic disruptions or disturbance of the peace in the Township.

~~define Hazard~~

- L. **PORTABLE CONTAINER STORAGE.** The storage of drums or other portable containers shall be limited to a building designed for this storage that provides for proper control of fugitive vapors and containment of releasable liquids. The floor of said building shall be of concrete or equivalent material.
- M. **STORAGE PRIOR TO DISPOSAL.** Storage of hazardous waste prior to disposal shall be confined to above ground permanent tanks with a total tank capacity not to exceed the twenty (20) day operating capacity of the facility. Storage in trailers, tankers, or similar equipment not currently licensed for such storage is prohibited. Storage of hazardous waste in underground tanks is prohibited.
- N. **STORAGE OF RESIDUES.** Storage of residue from operation of the facility shall be limited to 120 cubic yards which shall be completely covered by suitable material so as prohibit it from blowing, drifting, or otherwise moving from its point of storage.
- O. **SOLID WASTES DISPOSAL PRECLUDED.** Solid wastes, as defined and regulated by Act 641 of 1978, as amended, shall not be placed within a hazardous waste disposal facility in Columbus Township unless such action conforms to the St. Clair County Solid Waste Management Plan and the Columbus Township Landfill Ordinance No. 23.

#### **Section 9 - REPORTS, RECORDS, AND EMERGENCY NOTIFICATION**

- A. **RECORDS.** The permittee shall maintain written records of all hazardous wastes accepted by the facility. Said records shall detail the type, weight, volume and source of each waste as well as the shipping manifest and any processing or treatment of the waste which occurred at the facility before disposal.
- B. **EMERGENCY NOTIFICATION.** The Township shall be notified in the case of any spill or release of hazardous waste or similar emergency on-site within twenty-four (24) hours of the occurrence. If any person is injured and requires a doctor's care as a result of such emergency, the Township shall be notified within twelve (12) hours. If a death occurs, the Township shall be notified immediately. The first notice of any emergency shall be given to the Township Supervisor. If the Township Supervisor cannot be contacted, the second notice shall be given to a private security company, to be named by the Township Board.

#### **Section 10 - INSPECTION AND ENFORCEMENT.**

Any Registered Professional Engineer and/or Professional Hydrogeologist, appointed by the Township Board as an Ordinance inspection/enforcement officer, shall have the right of reasonable access to the site of any hazardous waste facility located within Columbus Township for the purpose of inspecting such facilities for compliance with this Ordinance, any other applicable Township ordinances, the rules, regulations, permits and licenses of any applicable state law. During the course of the inspection, the inspection/enforcement officer shall have the authority to conduct any tests and to examine the records of receiving, treatment, storage and disposal of wastes maintained by the operator.

Section 10 - INSPECTION AND ENFORCEMENT (Cont'd.)

Upon completion of any inspection which reveals violations of the Permit, the rules and regulations of the State of Michigan or an applicable state law, the inspection officer shall notify the appropriate enforcement agencies of the Township of Columbus, the County of St. Clair or the State of Michigan, or the federal government, of the existence of such violation and request of said agencies the institution of appropriate enforcement action. A copy of such notification shall be provided to the owner or operator of the hazardous waste facility. If the inspection reveals a violation of a Township ordinance, a county Ordinance, or any state law which provides the right of action to the Township for enforcement, the enforcement agency of the Township shall take such enforcement measure as provided by the ordinance being violated.

Section 11 - FEES FOR CLEAN-UP, EMERGENCY EQUIPMENT AND TRAINING OF EMERGENCY PERSONNEL

*separate  
Police* *Dove Ordinance*

*Inspection*

A. TIPPING FEE SCHEDULE. The following schedule of fees shall be paid by the operator based on the source of the waste disposed of at the facility:

- (1) \$1.75/ton for wastes generated within the State of Michigan.
- (2) \$2.00/ton for wastes generated within the operator's stated service area and outside the State of Michigan.
- (3) \$2.25/ton for wastes generated outside the stated service area but within the United States.
- (4) \$2.50/ton for wastes generated outside the United States.

B. PURPOSES FOR COLLECTION OF TIPPING FEES. The tipping fees shall be used for the purpose of equipment, training and training up-date of local emergency personnel, including but not limited to, police, fire and EMS. It shall also be used to establish a fund for clean-up in the event of an emergency on-site, and for correction of any affects on individual water supplies, and the like, for the restoration and re-use of the site after closure, and for any other purposes stated in the following Section 11, E.

C. PARTIAL RETURN OF FEES TO OPERATOR. For the purpose of rewarding all responsible operators of hazardous waste facilities, the clean-up fund from tipping fees shall not exceed \$5,000,000.00 from any individual facility. Once the fund reaches this limit for an individual facility, all interest earned shall be returned to the operator until final closure occurs.

D. COLLECTION OF TIPPING FEES. The tipping fees shall be submitted by the operator within 10 days of June 30th and December 31st of each year at the time of submission of the Inventory, as required by Section 8, H of this Ordinance.

E. EXPENDITURE OF TIPPING FEES. The expenditure of tipping fees shall be made by authority of the Township Board. The Township Board may use said fees for any of the following purposes:

- (1) Purchase of emergency service vehicles and equipment necessary to protect the health, safety and welfare of the residents of the Township of Columbus in the event of an emergency situation at a hazardous waste facility.
- (2) Training and training up-date of emergency service personnel, such as, but not limited to, fire, police and emergency medical service (EMS).
- (3) Establishment of a clean-up fund for hazardous waste accidents on or off-site.
- (4) Correction of any demonstrated affects on individual water supply wells.
- (5) Restoration and re-use of any hazardous waste disposal site after closure.
- (6) To take or promote whatever actions may be deemed necessary or appropriate to protect the environment of the area surrounding the hazardous waste facility from any existing, imminent, potential or possible detriment, impairment or pollution.
- (7) For the monitoring, inspecting and testing of soil, waste, air, or water samples, or the assessment of incoming waste materials.
- (8) To compensate property owners whose dwellings are adjacent to the hazardous waste disposal facility, and who sell, during the effective term of this Ordinance, their dwellings which were constructed prior to the permitting of a facility pursuant to this Ordinance, but only if the seller establishes by a preponderance of evidence that the existence and operation of the hazardous waste facility diminished the price of said dwelling from that which it would have brought but for the existence or operation of the hazardous waste facility. The amount of the distribution shall not exceed the difference between the actual selling price of said dwelling in a good faith, arms length transaction, and the price it would have brought but for the existence of the facility, and shall be reduced by an amount equal to any increase in value of said dwelling resulting from any improvements financed by previous distributions of tipping fees.

## Section 12 - VIOLATIONS AND PENALTIES

- A. Any person violating any of the provisions of this Ordinance shall be guilty of a misdemeanor, and upon conviction thereof shall be subject to a fine of not more than Five Hundred Dollars (\$500) plus costs of prosecution or imprisonment in the County Jail for a period of not to exceed ninety (90) days, or both such fine and imprisonment at the discretion of the Court, together with the costs of said prosecution.

## **Section 12 - VIOLATIONS AND PENALTIES (Cont'd.)**

- B. In addition to such fine and/or imprisonment, the Township Board may notify the owner and/or operator of any violation of the Permit and/or this Ordinance, and upon failure of the owner and/or operator to abate said violation within twenty-four (24) hours after delivery of said notice, said operation site may be closed and the Permit therefore suspended or revoked, and resort had to the bond for restoration.

Any owner and/or operator aggrieved by any notice sent pursuant to this Section, may file a written request for a Hearing before the Township Board. The request should set forth why the operation site should not be summarily closed, the Permit suspended or revoked, and resort had to the bond. The Township Board may summarily close the site and suspend or revoke the Permit pending a Hearing, if it is determined the health and safety of persons and/or property requires it.

## **Section 13 - REPEAL AND SAVINGS CLAUSE**

All Ordinances and parts of Ordinances inconsistent with the provisions of this Ordinance are hereby repealed, and specifically, Ordinance 22 is repealed in its entirety. The repeal of the above Ordinance and/or any amendments adopted to this Ordinance shall not affect or impair any act done, offense committed or right accruing, accrued or acquired of liability, penalty, forfeiture or punishment incurred prior to the time enforced, prosecuted or inflicted.

## **Section 14 - SEVERABILITY**

This Ordinance and the various parts, sections and clauses thereof are hereby declared to be severable. If any part, sentence, paragraph, section or clause is adjudged unconstitutional or invalid, it is hereby provided the remainder of the Ordinance shall not be affected thereby.

## **Section 15 - EFFECTIVE DATE**

This Ordinance shall become effective thirty (30) days after its publication in the Review.

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