

**PALM BEACH COUNTY
BOARD OF COUNTY COMMISSIONERS
SITTING AS THE ENVIRONMENTAL CONTROL BOARD**

AGENDA ITEM SUMMARY

Meeting Date: July 20, 2010 ☐ Consent ☒ Regular
 ☐ Ordinance ☐ Public Hearing

Department
Submitted By: PALM BEACH COUNTY HEALTH DEPARTMENT

Submitted For: ENVIRONMENTAL PUBLIC HEALTH


I. EXECUTIVE BRIEF

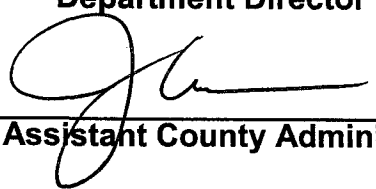
Motion and Title: Staff recommends a motion to approve on preliminary reading and advertise for public hearing on August 17, 2010 at 9:30 a.m., in the Jane M. Thompson Memorial Chambers, 6th Floor, Governmental Center, 301 N. Olive Avenue, West Palm Beach, Florida: An Ordinance of the Board of County Commissioners of Palm Beach County, Florida, sitting as the Environmental Control Board; repealing Chapter 11, Article X, of the Palm Beach County Code; providing for authority; providing for the inclusion in the code of laws and ordinances, and providing for an effective date.

SUMMARY: On July 21, 1992, the Board of County Commissioners, sitting as the Environmental Control Board, adopted the Palm Beach County Biohazardous Waste Incineration Facility (BWIF) Ordinance No. 92-22, which was incorporated into the Palm Beach County Code under Chapter 11, Article X. This ordinance is no longer needed due to the enactment of state and federal regulations which adequately address operations of medical waste incineration facilities. The proposed ordinance will repeal the BWIF Ordinance 92-22 in its entirety. Countywide (GB).

BACKGROUND AND JUSTIFICATION: The BWIF Ordinance was adopted in response to local concerns regarding the air emissions from biohazardous waste incineration facilities (i.e., medical waste incinerators). At the time of the BWIF Ordinance adoption, there were no federal or state air regulations addressing the emissions of toxic heavy metals or dioxins. In 1997, the U.S. Environmental Protection Agency (EPA) promulgated regulations for Hospital/Medical/Infectious Waste Incinerators based on "Maximum Achievable Control Technology." These regulations addressed the emissions of heavy metals and dioxins, and are equivalent, if not more stringent than the requirements of the BWIF Ordinance. The Florida Department of Environmental Protection (FDEP) has adopted the EPA rules by reference. In accordance with EPA regulations, medical waste incinerators are classified as major sources of air pollution and as such, are covered under the permitting provisions of Title V of the Clean Air Act. For proper enforcement, it is necessary to include the provisions of the BWIF Ordinance, as well as the EPA and FDEP regulations in the Title V permits for these facilities. This results in a regulatory burden. Furthermore, EPA adopted new regulations in 2009 that further tightened the federal emission standards for medical waste incinerators. Health Department air program staff has conducted a technical and regulatory evaluation of the BWIF Ordinance (Attachment 2) and has concluded that repealing the BWIF Ordinance will not diminish public health protection.

- ATTACHMENTS:**
- 1. Proposed Ordinance.
 - 2. Technical and Regulatory Evaluation, Repeal of BWIF Ordinance No. 92-22.

Recommended By:  6/30/10
 Department Director Date

Approved By:  7/9/10
 Assistant County Administrator Date

II. FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

Fiscal Years 2010 2011 2012 2013 2014
Capital Expenditures _____
Operating Costs _____
Operating Revenues _____
Is Item Included In Current Budget? Yes _____ No _____
Budget Account No: Fund _____ Department _____ Unit _____ Object _____
Reporting Category _____

B. Recommended Sources of Funds/Summary of Fiscal Impact: * The County is preempted by state statute from collecting air pollution license fees from these facilities, but the Health Department receives funding from the Florida Department of Environmental Protection to cover the costs for permitting and compliance monitoring. The repeal of this ordinance will have no significant fiscal impact other than a savings of staff time performing permitting and inspections.

III. Review Comments:

A. OFMB Fiscal and/or Contract Administration Comments:

[Signature] 7/7/10 OFMB
[Signature] 7/7/10 Contract Administration
[Signature] 7/7/10

B. Legal Sufficiency:

[Signature] 7/9/10
Assistant County Attorney

C. Other Department Review:

Department Director

(THIS SUMMARY IS NOT TO BE USED AS A BASIS FOR PAYMENT.)

ORDINANCE NO. 2010-

AN ORDINANCE OF THE BOARD OF COUNTY COMMISSIONERS OF
PALM BEACH COUNTY, FLORIDA, SITTING AS THE
ENVIRONMENTAL CONTROL BOARD, REPEALING CHAPTER 11,
ARTICLE X, OF THE PALM BEACH COUNTY CODE (ORDINANCE
NO 92-22), ENTITLED "BIOHAZARDOUS WASTE INCINERATION
FACILITIES"; PROVIDING FOR AUTHORITY; PROVIDING FOR
THE INCLUSION IN THE CODE OF LAWS AND ORDINANCES; AND
PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, on July 21, 1992, the Environmental Control
Board adopted the Palm Beach County Biohazardous Waste
Incineration Facilities Ordinance No. 92-22 to provide
better protection from the toxic air pollutants emitted
from these sources.

WHEREAS, the adoption of the Biohazardous Waste
Incineration Facilities Ordinance predated federal and
state regulations controlling air toxics emissions from
these sources.

WHEREAS, the federal and state regulations have since
been adopted that provide for public health protection and
are equivalent, if not more stringent, than the provisions
of the Biohazardous Waste Incineration Facilities
Ordinance.

WHEREAS, biomedical waste incineration facilities in
Palm Beach County are currently regulated by federal,
state as local regulations that may overlap or vary to
some extent which leads to more complicated permits and
additional monitoring.

WHEREAS, repealing the Palm Beach County Biohazardous
Waste Incineration Facilities Ordinance will reduce the
regulatory burden while maintaining adequate public health
protection.

NOW, THEREFORE, be it ordained by the Board of County
Commissioners of Palm Beach County, Florida that:

SECTION 1. REPEALER

Ordinance NO. 92-22, known as Biohazardous Waste
Incineration Facilities is hereby repealed.

SECTION 2. AUTHORITY:

This Ordinance is repealed under the authority of the
Palm Beach County Environmental Control Act, Chapter
77-616, Special Act, Laws of Florida, as amended.

**SECTION 3. INCLUSION IN THE CODE OF LAWS AND
ORDINANCES:**

The provisions of this Ordinance shall become and be
made part of the Code of Laws and ordinances of Palm
Beach County, Florida. The sections of this ordinance
may be renumbered or relettered to accomplish such, and
the word "ordinance" may be changed to "section" or
"article" or other appropriate word.

SECTION 4. EFFECTIVE DATE:

The provisions of this Ordinance shall become effective
upon filing with the Secretary of State.

APPROVED AND ADOPTED by the Board of County Commissioners
of Palm Beach County, Florida, on this the _____ day
of _____, 2010.

SHARON BOCK,
CLERK AND COMPTROLLER

PALM BEACH COUNTY, FLORIDA,
BY ITS
BOARD OF COUNTY COMMISSIONERS

By: _____
Deputy Clerk

By: _____
Burt Aaronson, Chairman

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY

By: _____
County Attorney

Filed with the Department of State on the _____ day
of _____, 2010.

Justification to repeal the County Ordinance No. 92-22

Biological Waste Incineration Facilities

Technical and Regulatory Evaluation

Executive Summary

On July 21, 1992, the Palm Beach County Environmental Control Board adopted an ordinance (no. 92-22) to regulate the air pollutant emissions from the Biological Waste Incineration Facilities (BWIFs).

The Florida Department of Environmental Protection (FDEP) has regulations for biological waste incinerators since before 1992. However, heavy metals (such as Cadmium, Chromium, Lead and Mercury), and dioxins were not addressed in these regulations. The county ordinance was more stringent than the FDEP regulations in various aspects and provided more protection to the public in Palm Beach County by controlling the air emissions of heavy metals and dioxins from these incinerators. The county rules were later incorporated into the 'Specific Operating Agreement' between the FDEP and the Palm Beach County Health Department.

While the county ordinance was more protective than the FDEP regulation, the advent of the EPA rules resulted in the county ordinance to be redundant and burdensome without any additional environmental benefit.

On September 15, 1997, the Environmental Protection Agency (EPA) finalized the regulations for Hospital/Medical/Infectious Waste incinerators and promulgated the emission standards to reduce the air pollutants, including heavy metals and dioxins. The EPA's regulations were based on the Maximum Achievable Control Technology (MACT) and are more stringent than those of the county ordinance. The EPA introduced separate regulations for the existing incinerators and the new incinerators. Existing incinerators were those that were operating before the rule was finalized. The FDEP adopted the EPA rules by reference in the Chapter 62-204, Florida Administrative Code (F.A.C.).

As a part of the EPA's regulations, the BWIFs are required to monitor continuously various parameters of the incineration and the control devices, so that the efficient operation of the incinerator and the regulatory compliance are assessed.

Moreover, On October 06, 2009, the EPA revised the rules for the hospital incinerators to further reduce the emissions of heavy metals and dioxins by more than 90%.

Hence, it is proposed to repeal the county ordinance to reduce the regulatory burden to the facilities, and to streamline the permit document.

Introduction

On July 21, 1992, the Palm Beach County Environmental Control Board adopted the ordinance No. 92-22 (codified in Palm Beach County Code Chapter 11, Environmental Regulation and Control, Article X, Sections 11-231 through 11-243) for the Biohazardous Waste Incineration Facilities (BWIFs). This ordinance contains specific provisions related to the county license application, air pollutant emission standards, pollutant testing frequencies, record keeping, and waste management plan. The BWIFs are classified into three groups based on the operating capacity and the larger facilities are subject to stricter standards.

The Florida Department of Environmental Protection (FDEP) also regulates the biological waste incinerators and these regulations were incorporated in the Chapter 62-296, Florida Administrative Code (F.A.C.) and were effective since before 1992. The county ordinance is broader in scope than the FDEP regulations, since only the county ordinance has the provisions to control the heavy metals and dioxin/furans. Later, the county ordinance was **approved** and incorporated into the specific operating agreement between the FDEP and the Palm Beach County.

On September 15, 1997, the U.S. Environmental Protection Agency (EPA) promulgated the performance standards -- as mandated by the Clean Air Act -- for Hospital/Medical/Infectious waste incinerators. The EPA regulations addressed the heavy metals and dioxins akin to the county ordinance, and the EPA established the air pollutant standards based on the Maximum Achievable Control Technology (MACT) that is available to the industry.

Similar to the county ordinance, the EPA standards are also more stringent for larger incinerators. In addition, the EPA regulations are more stringent for modified and new incinerators, since the new facilities have access to modern control technology in controlling the air pollutants. The county ordinance does not differentiate between the new and the existing incinerators.

The regulations for existing incinerators are found in 40 CFR Part 60 Subpart Ce; and the regulations for modified and new incinerators are found in 40 CFR Part 60 Subpart Ec. The FDEP adopted these regulations by reference in the Chapter 62-204., F.A.C.

While the county ordinance controls more air pollutants when compared to the FDEP regulation, the advent of the EPA regulations caused the county ordinance to be redundant. All incinerators shall comply with the EPA standards, and also with FDEP requirements whenever they are stricter than the EPA requirements. Thus, the county ordinance currently creates regulatory burden to the facilities without providing any additional environmental benefit.

The following sections present the review and analysis of the regulations promulgated by the County, FDEP, and EPA, and each section ends with a comment regarding the effect of the elimination of the county ordinance.

Incinerator Classification

The regulations of the County, FDEP, and the EPA classified the incinerators into three groups based on the operating capacity, as shown below (Table 1).

Table 1: Incinerator classifications

Regulation	Operating Capacity (pounds/hr)		
	Small	Medium	Large
County	< 300	> 300 <= 1000	> 1000
FDEP	< 500	> 500 <= 2000	> 2000
EPA	< 200	> 200 <= 500	> 500

In addition, the EPA also classified the incinerators based on the date of construction and the modification. If the construction of an incinerator was commenced on or before June 20, 1996, it was classified as an 'existing' incinerator. Those incinerators that commenced construction after June 20, 1996 or modified after March 16, 1998 are classified as 'new' incinerators.

When compared with the county ordinance and the FDEP regulation, the EPA regulations for new incinerators are extremely stringent. So, if a new incinerator were to be constructed in the county, it will be subject to the EPA regulations, that are much tougher than the county ordinance, since the incinerator would be classified as 'new'.

Currently, Bethesda Memorial Hospital (ID # 0990095) and Boca Raton Community Hospital (ID# 0990119) have incinerators that burn hospital waste at the rate of 1000 lb/hr and 730 lb/hr respectively. These incinerators are classified as 'medium' according to the County and FDEP, and are classified as 'large' according to the EPA (shaded cells in Table 1)

Air Pollutant Emission Limits

All three regulations aim at reducing Carbon Monoxide (CO), Particulate matter (PM), and Hydrochloric acid (HCL) from the incinerators. Table 2 enumerates the pollutants controlled by different regulations.

Table 2: Air pollutants regulated by the different regulations

Pollutant			
	County	FDEP	EPA
Carbon Monoxide (CO)	√	√	√
Particulate Matter (PM)	√	√	√
Hydrochloric Acid (HCL)	√	√	√
Cadmium (Cd)	√		√
Chromium (Cr)	√		
Lead (Pb)	√		√
Mercury (Hg)	√		√
Dioxins/Furans	√		√
Sulfur Dioxide (SO2)	√		√
Nitrogen Oxides (NOx)			√

The FDEP regulations do not address heavy metals such as Cd, Cr, Hg, and Pb as well as dioxins/furans. The EPA did not consider the emissions of chromium from the incinerators to be significant enough to promulgate regulations for its control. Till the advent of EPA regulations only county ordinance controlled the emissions of heavy metals and dioxins. Only EPA regulations control NOx emissions from these incinerators. Table 3 shows the pollutant limits according to the different regulations.

Both the County and the FDEP have identical standards for CO and HCL. The EPA’s regulations are tougher in controlling CO, PM emissions from both existing and new incinerators; and in controlling HCL emissions from new incinerators.

Heavy Metals & Dioxins/Furans: While the EPA established the stack test limits for the heavy metals and dioxins/furans, the County ordinance established the acceptable ambient concentrations (AACs). EPA standards are complied with when the facilities conduct a stack test that shows the pollutant concentrations in the stack flue gas are below the allowable limit. However, to demonstrate compliance with the county’s AACs, the facilities must run an air dispersion model to predict the downwind concentrations of the pollutants in the ambient air, and these concentrations shall be below the AACs.

COMMENT: Continuation of the County’s regulations does not provide any additional benefit in terms of air pollutant emissions control.

Table 3: Air pollutant Standards according to the County, FDEP, and EPA regulations

Pollutant	Palm Beach County Ordinance			EPA Regulations						FDEP Standards		
	(Effective August 04, 1992)			EXISTING INCINERATORS (40 CFR 60 Subpart Ce)			NEW Incinerators (40 CFR 60 Subpart Ec)			Rule 62-296.401, F.A.C.		
	Small	Medium	Large	Small	Medium	Large	Small	Medium	Large	Small	Medium	Large
	< 300 lb/hr	300 lb/hr – 1000 lb/hr	> 1000 lb/hr	< = 200 lb/hr	> 200 lb/hr <= 500 lb/hr	> 500 lb/hr	< = 200 lb/hr	> 200 lb/hr <= 500 lb/hr	> 500 lb/hr	<= 500 lb/hr	> 500 lb/hr < = 2000 lb/hr	> 2000 lb/hr
CO	100 ppm			40 ppm			40 ppm			100 ppm		
PM	0.10 gr/dscf	0.030 gr/dscf	0.015 gr/dscf	115 mg/m ³ or 0.05 gr/dscf	69 mg/m ³ (0.03 gr/dscf)	34 mg/m ³ or 0.015 gr/dscf	69 mg/m ³ (0.03 gr/dscf)	34 mg/m ³ or 0.015 gr/dscf		0.100 gr/dscf	0.030 gr/dscf	0.020 gr/dscf
HCL	4 lb/hr or 90%		50 ppm or 90%	100 ppm or 93%			15 ppm or 99%			4 lb/hr		50 ppm or 90%
VE	5% (20% for 3 minutes in one hour)			10%			10%			5% (15% for 6 minutes in one hour)		
SO2			30 ppm or 90%	55 ppm			55 ppm					
NOx				250 ppm			250 ppm					
Cadmium	5.6 e -04 µg/m3*			0.16 mg/dscm (0.07 gr/Kdscf) or 65% reduction			0.16 mg/dscm (0.07 gr/Kdscf) or 65% reduction	0.04 mg/dscm (0.02 gr/Kdscf) or 90% reduction				
Chromium	8.3 e -05 µg/m3*											
Lead	0.09 µg/m3*			1.2 mg/dscm (0.53 gr/Kdscf) or 70% reduction			1.2 mg/dscm (0.52 gr/Kdscf) or 70% reduction	0.07 mg/dscm (0.03 gr/Kdscf) or 98% reduction				
Mercury	0.3 µg/m3*			0.55 mg/dscm (0.24 gr/Kdscf) or 85% reduction			0.55 mg/dscm (0.24 gr/Kdscf) or 85% reduction					
Dioxins	2.2e-08 µg/m3*			125 nano grams/dscm (55 gr/billion dscf) OR 2.3 nanograms per dscmTEQ (1.0 gr/billion dscf)			125 nano grams/dscm (55 gr/billion dscf) OR 2.3 nanograms per dscmTEQ (1.0 gr/billion dscf)	25 nano grams/dscm (11 gr/billion dscf) OR 0.6 nanograms per dscmTEQ (0.26 gr/billion dscf)				

*Compliance with these standards is demonstrated based on the results of an air dispersion model (Stack test results are used to demonstrate compliance for the rest of the County's standards)

Note: Pollutants with no standards are denoted by the shaded cells.

Operator Training and Qualification Requirements

The county ordinance does not have any provisions for the operator training and qualification requirements. However, the EPA imposes extensive requirements concerning operator training, operator qualifications, refresher course requirements, and record keeping requirements. These requirements will aid in ensuring that the incinerators are operated and maintained according to the manufacturer and regulatory requirements. FDEP does not have separate regulations but adopts the regulations promulgated by the EPA.

COMMENT: Repealing the county ordinance does not have any effect.

Waste Management Plan

Both the county and EPA regulations require waste management plans from the regulated facilities. The plans should identify the facility's approaches to minimize the waste by selecting alternative products or segregating the waste stream. The waste management plan may include the elements related to paper, plastics, batteries, or metal recycling. The FDEP regulations do not contain provisions regarding the waste management plan.

COMMENT: Repealing the county ordinance will not lessen the requirements for waste management plan.

Monitoring Requirements

The county ordinance requires the continuous emission monitoring of CO for small BWIFs; CO and opacity for medium BWIFs; and CO, opacity, and SO₂ for large BWIFs. For large BWIFs, the county ordinance requires a minimum of two- second residence time at 1800°F in the secondary (last) combustion chamber.

EPA acknowledged that SO₂ is not a significant pollutant from these incinerators and the county's requirement to monitor SO₂ continuously will to be expensive to the facilities without providing any environmental benefit.

The EPA regulations rely on parametric monitoring, instead of emission monitoring, to assure proper operation of the incinerator, and to verify continuous compliance with the emission standards. The parameters to be monitored are based on the type of air pollutant control device installed. Table 4 provides the details of parameters and the pollutants affected by those parameters. When all parameters for a given pollutant are out side of the prescribed range, then such occurrence constitutes the violation of the emission standards for that pollutant. The County ordinance does not require any monitoring to assure compliance with dioxins/furans, HCL, and Hg.

The FDEP regulations require the continuous monitoring of temperature in the secondary chamber as well as oxygen in the flue gas. The secondary chamber temperature shall not be less than 1800° F and must have at least one-second residence time.

Continuous monitoring of the pollutants, as required by the county ordinance is expensive to the facilities especially for the large facilities where SO₂ monitoring is needed. Such monitoring would not yield additional benefit when the facilities are required to *monitor many parameters* according to the EPA regulation. It is to be noted that, EPA regulations, that were finalized on October 06, 2009, require CO monitoring for new incinerators.

Repealing the County ordinance will streamline the monitoring requirements and will help the operators to focus on combustion parameters and the operation of control devices.

COMMENT: Repealing the ordinance for the BWIFs will not compromise the protection of the environment and public health.

Table 4: Parameters to be monitored according to the EPA regulations

Pollutant Affected	Monitored parameters based on control device		
	Dry Scrubber (DS) followed by Fabric Filter (FF)	Wet Scrubber (WS)	Dry Scrubber (DS) followed by Fabric Filter (FF) AND Wet Scrubber (WS)
CO	> maximum charging rate, AND < minimum secondary chamber Temp.	> max. charge rate < min. secondary chamber Temp.	> max. charge rate, AND < min. secondary chamber Temp.
Dioxin/Furan	> max. FF inlet Temp., AND > max. charging rate, AND < min. dioxinx/furons sorbent flow rate	> max. charge rate, AND < min. secondary chamber Temp., AND < min. scrubber liquor flow rate	> max. FF inlet Temp., AND > max. charge rate, AND < min. dioxins/furans sorbent flow rate
HCL	> max. charge rate, AND < min. HCL sorbent flow rate	> max. charge rate, AND < min. scrubber liquor pH	> max. charge rate, AND < min. scrubber liquor pH
PM		> max. charge rate, AND < min. pressure drop, AND < min. HP or amperage to system	
Hg	> max. charge rate, AND < min. Hg sorbent flow rate	> max. flue gas Temp. AND > max. charge rate	> max. charge rate, AND < min. Hg sorbent flow rate
PM, dioxins/furans, HCL, Pb, Cd, Hg	Use of bypass stack (EXCEPT during Startup, Shutdown, and Malfunctions*)	Use of bypass stack (EXCEPT during Startup, Shutdown, and Malfunctions*)	Use of bypass stack (EXCEPT during Startup, Shutdown, and Malfunctions*)

NOTE: The new EPA regulations, finalized on October 06, 2009, removed the exemptions during Startup, Shutdown, and Malfunctions.

Compliance Testing Frequency

The County ordinance requires the small BWIFs to conduct the stack test for CO, opacity, PM, HCL annually; and for heavy metals (Cd, Cr, Hg, Pb) and dioxins/furans once every 5 years. The medium BWIFs should conduct the stack test for all pollutants annually. However, if the facility provides a waste management plan, then the testing for heavy metals and dioxins/furans is deferred to once in 5 years. For large BWIFs, the stack test is required for all pollutants annually. Currently, Palm Beach County does not have any BWIFs that are classified as 'large' according to the county ordinance.

The FDEP regulation requires the small incinerators to conduct stack test for opacity annually, and for PM and HCL once every 5 years. Medium and large incinerators require the stack test for CO, PM, and opacity annually.

The EPA regulation requires all incinerators to conduct the stack test for CO, opacity, PM, HCL annually, and for heavy metals and dioxins/furans once every 5 years. The EPA also relaxed the compliance frequency for CO, PM and HCL to once every three years, if the incinerators show compliance for these pollutants for three consecutive years. Although the EPA allows the reduced compliance test frequency, the facilities are still required to conduct stack test for CO, opacity, PM, HCL every year to comply with the FDEP regulations.

COMMENT: Elimination of county ordinance will not change the test frequency for the existing incinerators.

Ash Testing

The county ordinance requires the BWIFs to test the ash using the Toxicity Characteristic Leaching Procedure (TCLP) for four heavy metals (Cd, Cr, Pb and Hg). This test, required quarterly, is used to determine whether ash is 'hazardous' or not. TCLP estimates the toxicity of ash, not by quantifying the content of heavy metals, but by simulating the leaching ability of these heavy metals.

The EPA and FDEP regulations do not require the ash testing. FDEP's Hazardous Waste regulations also do not require such testing. The results of the ash tests conducted at the two incinerators in the last two years are shown below (Table 5).

Table 5: Results of ash testing at two hospital incinerators

Heavy Metal	Test Result	Test Result (mg/l)		TCLP Limit (mg/l) (40 CFR 261.24)	% below standard
		Bethesda Hospital	Boca Raton Community Hospital		
Cadmium	Minimum	U	U	1.0	95.54
	Maximum	0.0446	U		
Chromium	Minimum	0.00103	0.01	5	96.70
	Maximum	0.165	0.11		
Lead	Minimum	0.00433	U	5	99.20
	Maximum	0.0399	0.01		
Mercury	Minimum	U	U	0.2	99.00
	Maximum	0.002	U		

U = Undetected in Lab analysis

The test results reveal that ash from these incinerators is significantly below ‘hazardous’ threshold and does not pose a threat to environment. Repealing the ordinance will remove the regulatory burden and monitoring expenses to the facilities.

COMMENT: Repealing the county ordinance will not affect the environmental protection

Reporting Requirements

County ordinance requires the facilities to submit the quarterly summaries of the continuous emission monitoring (CEM) data, malfunctions, and corrective actions taken, and to retain these records for at least 2 years.

The EPA also requires the quarterly submission of the CEM data. In addition, the facility is required to submit semi-annual reports that include the values of the monitoring parameters, times and durations of malfunctions, corrective actions taken, and the identification of days when the operating parameters exceeded the applicable limits. The facility shall maintain these records for 5 years.

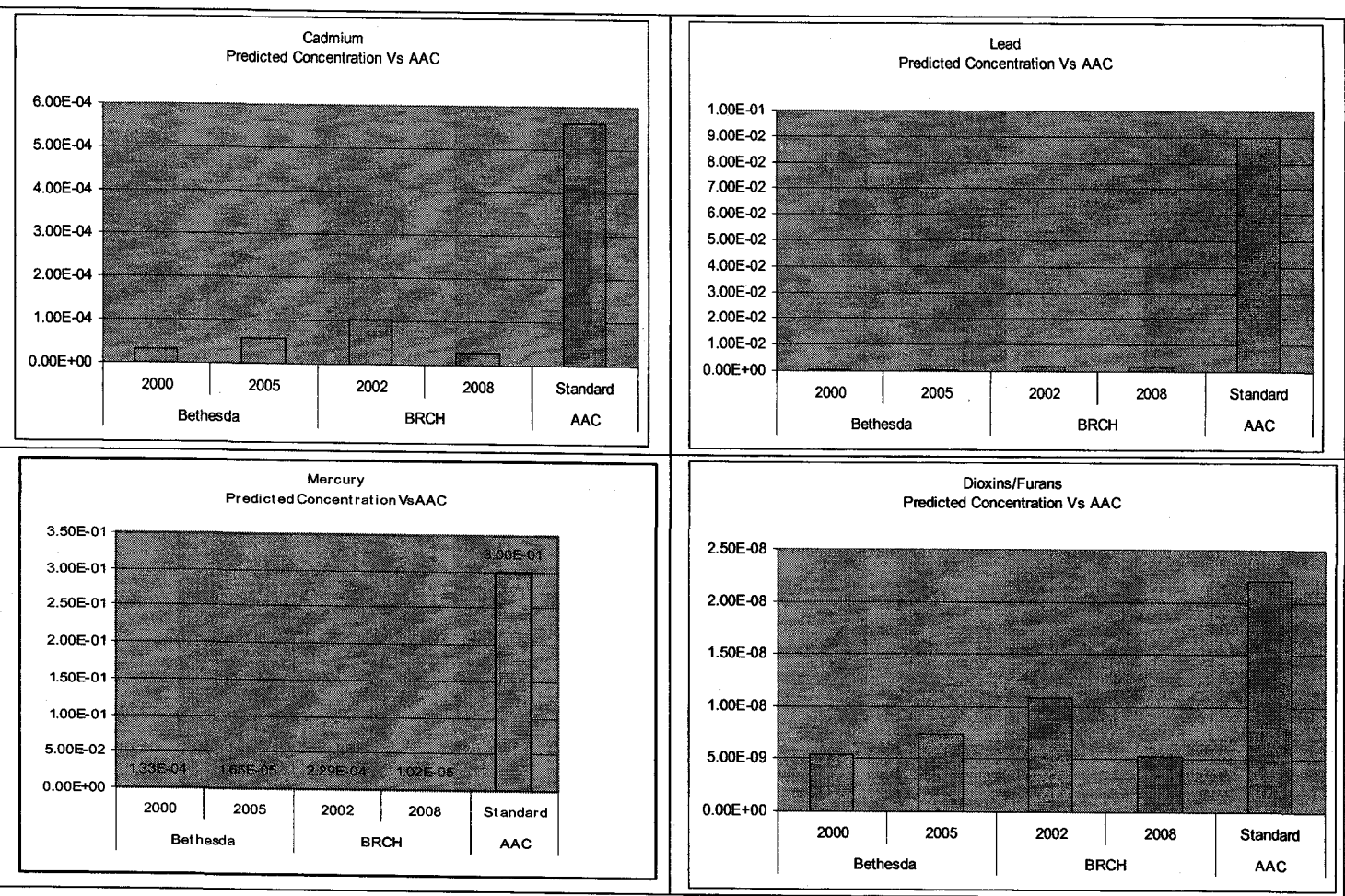
COMMENT: Repealing the county ordinance will not reduce the reporting requirements.

Miscellaneous Requirements

Air dispersion modeling requirements:

County ordinance requires the facilities to use air dispersion model to show compliance with the acceptable ambient concentrations (AACs) for heavy metals and dioxins. The facility conducts the stack test for these pollutants, and uses the test results as input data in the dispersion model. The ordinance requires the small and medium BWIFs to demonstrate compliance with AACs once every 5 years.

The graphs below show the results of the stack tests conducted at Bethesda Hospital (yrs 2000, 2005) and Boca Raton Community Hospital (yrs 2002, 2008) in comparison with the AACs for the heavy metals regulated by the EPA.



As stated previously, the stack results for the heavy metals are used in demonstrating the compliance with EPA’s emission standards. It appears that if the facility is in compliance with the EPA’s emission limits, then it is likely that the compliance with AACs is achieved. It is to be noted that the EPA significantly lowered the emission limits for heavy metals in the regulations that were finalized on September 15, 2009.

COMMENT: Repealing the county ordinance will not increase the impact of heavy metals and dioxins. Moreover, it will reduce the regulatory burden and reporting requirements for the regulated facilities.

County Fee:

S. 403.0873, F.S and the Specific Operating Agreement with FDEP state that the facilities with the Title V permits shall not be required to pay the county license fee. All BWIFs are regulated by the EPA and are required to obtain a Title V permit. Thus, the BWIFs are exempt from paying the county license fee, and the county fee schedule was recently amended by deleting the BWIFs from the list of facility categories.

COMMENT: Repealing the county ordinance will not affect county fee.

Public notice requirements:

The county ordinance requires the new or modified BWIFs, upon submission of application, to publish notice of intent to construct or modify a BWIF. Such notice should be published one time in a news paper and it will provide an opportunity to public to review the application.

The BWIFs need to submit an application for a Title V permit according to the EPA regulations. When the application is complete and reasonable assurance is provided that the incinerator will comply with the applicable regulations, the Health Department will issue an ‘intent to issue’ along with a draft permit. The facility is required to publish the ‘intent to issue’ in a news paper one time, and the public will have 30 days to comment on the permit and the application. Thus, the public still has an opportunity to voice their concerns, if any. Moreover, the EPA regulations require such ‘intent to issue’ to be published at every renewal and modification of the incinerator, as opposed to a one time publication as per county ordinance.

COMMENT: Repealing the county ordinance will not affect the public’s right to review and comment on the new applications.

New EPA regulations:

On October 06, 2009, the EPA published the final revisions to the 1997 regulations for Hospital/Medical/Infectious waste incinerators, and these revisions reflect the currently available control technology and are more stringent than the current regulations. Both existing and new incinerators are affected by these revisions. Comparison of current and the proposed emission standards for air pollutants from existing and new LARGE incinerators is presented below (Table 6). Large incinerators are those with a capacity of 500 pounds per hour or more.

Table 6: Comparison of EPA’s current and proposed standards for large incinerators

		Large Incinerators					
		Existing			New		
Air Pollutant	Units	Current	Proposed	Reduction	Current	Proposed	Reduction
CO	ppm	40	11	72.50%	40	11	72.50%
PM	mg/m ³	34	25	26.47%	34	18	47.06%
HCL	ppm	100	6.6	93.40%	15	5.1	66.00%
SO2	ppm	55	9	83.64%	55	1.6	97.09%
NOx	ppm	250	140	44.00%	250	130	48.00%
Cadmium	mg/dscm	0.16	0.0092	94.38%	0.04	0.00013	99.75%
Lead	mg/dscm	1.2	0.036	97.00%	0.07	0.00069	99.14%
Mercury	mg/dscm	0.55	0.018	96.73%	0.55	0.0013	99.76%
Dioxins	ng/dscm	125	9.3	92.56%	25	9.3	62.80%

The revised rules tightened the standards for the heavy metals and dioxins by more than 92%. Since the incinerators at Bethesda Memorial Hospital and Boca Raton Community Hospital are currently active, these incinerators will be considered ‘existing’ under the revised EPA regulations. EPA generally allows the ‘existing’ facilities to demonstrate compliance with the new revisions within 3 years after the FDEP adopts these revisions, but no later than October 06, 2014.

CONCLUSION

The County Ordinance aided in controlling emissions of heavy metals and dioxins from the hospital waste incinerators, since these pollutants were not regulated by FDEP rules. However, since the advent of the EPA regulations in 1997, which included the control of heavy metals and dioxins, the county ordinance became redundant and imposed undue regulatory burden on the facilities. Moreover, the EPA finalized the revisions to the current regulations to further control the air pollutant emissions.

Hence, repealing the county ordinance will reduce the regulatory burden to the facilities without diminishing the environmental and public health protection.