

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF THE DIRECTOR

In the matter of administrative proceedings)
against **HENRY FORD HEALTH**)
SYSTEM d/b/a HENRY FORD WEST)
BLOOMFIELD HOSPITAL, a corporation)
organized under the laws of the State of)
Michigan and doing business at 6777 West)
Maple Road, in the Township of West)
Bloomfield, County of Oakland, State of)
Michigan)

AQD No. 1-2013

SRN: P0336

STIPULATION FOR ENTRY OF FINAL ORDER
BY CONSENT

This proceeding resulted from allegations by the Michigan Department of Environmental Quality (MDEQ), Air Quality Division (AQD) against Henry Ford Health System, d/b/a/ Henry Ford West Bloomfield Hospital (Company), a Michigan corporation located at 6777 West Maple Road in the Township of West Bloomfield, County of Oakland, State of Michigan, with State Registration Number (SRN) P0336. The MDEQ alleges that the Company is in violation of the Michigan Administrative Code (MAC), 2001 AACS, R 336.1210, Prevention of Significant Deterioration (PSD) 40 Code of Federal Regulations (CFR) 52.21, New Source Performance Standards (NSPS) for Small Industrial-Commercial-Intituitional Steam Generating Units 40 CFR Part 60, Subparts A and Dc, NSPS for Stationary Compression Ignition and Spark Ignition Internal Combustions 40 CFR Part 60, Subparts A, IIII (41), and MAC, 2008 AACS, R 336.1201. Specifically, the Company installed four (4) steam boilers and three (3) diesel emergency generators which the MDEQ alleges required them to without first obtaining a Permit to Install (PTI), a Renewable Operating Permit (ROP), complying with the NSPS for boilers/generators, or properly limiting potential to emit of sulfur dioxide emissions to avoid being subject to PSD as cited herein and in the Violation Notice dated May 3, 2012. The Company and MDEQ stipulate to the termination of this proceeding by entry of a Stipulation for Entry of a Final Order by Consent (Consent Order).

The Company and MDEQ stipulate as follows:

1. The Natural Resources and Environmental Protection Act, 1994 PA 451 (Act 451), MCL 324.101 *et seq.* is an act that controls pollution to protect the environment and natural resources in this State.
2. Article II, Pollution Control, Part 55 of Act 451 (Part 55), MCL 324.5501 *et seq.* provides for air pollution control regulations in this State.
3. The MDEQ was created as a principal department within the Executive Branch of the State of Michigan pursuant to Executive Order 2011-1 and has all statutory authority, powers, duties, functions and responsibilities to administer and enforce all provisions of Part 55.
4. The Director has delegated authority to the Chief of the AQD (AQD Chief) to enter into this Consent Order.
5. The termination of this matter by a Consent Order pursuant to Section 5528 of Part 55 is proper and acceptable.
6. The Company and the MDEQ agree that the signing of this Consent Order is for settlement purposes only and does not constitute an admission by the Company that the law has been violated.
7. This Consent Order becomes effective on the date of execution (effective date of this Consent Order) by the AQD Chief.
8. The Company shall achieve compliance with the aforementioned regulations in accordance with the requirements contained in this Consent Order.

COMPLIANCE PROGRAM AND IMPLEMENTATION SCHEDULE

9. Permit
PTI No. 72-12 was issued to the Company on September 12, 2012 and it and any subsequent permit revision prior to the termination of this Consent Order shall be attached hereto as Exhibit A and made enforceable as part of this Consent Order.
10. Monitoring/Testing
The Company shall keep, in a satisfactory manner, fuel supplier certifications records or fuel sample test data for each delivery of diesel fuel oil used in each boiler and each emergency generator. The certification or test data shall include the name of the oil supplier or laboratory, and the sulfur content of the fuel oil.

SUPPLEMENTAL ENVIRONMENTAL PROJECTS

11. The Company agrees to undertake the Supplemental Environmental Projects (SEPs) described in Exhibit B which is attached, incorporated by reference and made enforceable under this Consent Order. Performance of the SEPs will benefit the environment and are projects which the Company is not otherwise legally required to perform. The Company agrees to implement the SEPs in accordance with the details specified in Exhibit B and the following terms and conditions:

A. The total expenditure for the SEPs is estimated to be \$313,761.00 as provided below. All costs of the SEPs shall be the responsibility of the Company. For the SEPs which are fully and completely implemented, to the extent that the actual expenditures for the SEPs totals less than 90% of \$313,761.00 the Company is subject to a stipulated penalty of up to \$107,000.00 depending on the size of the monetary shortfall realized by the Company. Payment of any stipulated penalty shall be made as outlined in paragraph 16.

B. The plan included as Exhibit B contains a schedule, including specific dates for the implementation of the SEPs. The Company shall fully implement all aspects of the SEPs within the specified schedule.

C. The Company certifies that the Company is not otherwise required by any local, state, or federal statute, regulation, rule, order, decree, permit, or other law or agreement, to develop or implement the SEPs activity specified in Exhibit B. The Company further certifies that the Company has not received, and is not presently negotiating to receive, a credit for the SEPs as part of any other enforcement action or any grant from the state, U.S. Environmental Protection Agency (EPA) or any other entity.

D. In the event the Company fails to fully and completely implement the SEPs as provided here, the MDEQ will provide written notice to the Company describing the nature of the deficiency. The Company shall have thirty (30) days from receipt of the notice to submit documentation to the AQD Southeast Michigan District Supervisor demonstrating that the deficiency has been corrected. In the event the deficiency is not corrected, the Company will be notified and the Company shall be in violation of this Consent Order and required to pay a stipulated penalty of up to \$107,000.00 to the MDEQ, subject to the requirements of paragraph 16. The amount of the stipulated penalty may be reduced or waived by the MDEQ if the Company made good faith and timely efforts to complete the project. Payment of stipulated penalties under the terms of this paragraph shall satisfy the Company's obligation to complete

the SEPs under this Consent Order. Payment of any stipulated penalty shall be made as outlined in paragraph 16.

E. The Company agrees that any public statement, oral or written, making reference to the SEPs shall include the following language: "This project was undertaken in connection with the settlement of an enforcement action taken by the Michigan Department of Environmental Quality for alleged violations of the Clean Air Act."

F. After the effective date of this Consent Order, until completion of all activities specified in Exhibit B, the Company shall provide the AQD Southeast Michigan District Supervisor with a progress report every three months. Each progress report shall include a description of the SEP activities the Company completed in the prior three months.

G. No later than thirty (30) days after the completion of all activities specified in Exhibit B, the Company shall submit written certification of completion of the SEPs to the AQD Southeast Michigan District Supervisor demonstrating that all SEP activities specified in Exhibit B have been completed in accordance with the terms and conditions of this Consent Order and Exhibit B. The certification shall be accompanied by appropriate documentation (such as invoices or receipts) to verify the total expenditure as a result of implementing the activities specified under Exhibit B.

GENERAL PROVISIONS

12. On and after the effective date of this Consent Order, except as otherwise provided by the administrative rules of Part 55, the Company shall not install, construct, reconstruct, relocate, alter, or modify any process or process equipment including control equipment pertaining thereto, which may emit an air contaminant, unless a permit to install which authorizes such action is issued by the MDEQ pursuant to Rule 201, the Company is issued a waiver pursuant to Rule 202, or the change is exempt from the requirements of Rule 201.

13. This Consent Order in no way affects the Company's responsibility to comply with any other applicable state, federal, or local laws or regulations, including without limitation, any amendments to the federal Clean Air Act, 42 USC 7401 *et seq.*, Act 451, Part 55 or their rules and regulations, or to the State Implementation Plan.

14. This Consent Order constitutes a civil settlement and satisfaction as to the resolution of the violations specifically addressed herein; however, it does not resolve any criminal action that may result from these same violations.

15. Within thirty (30) days after the effective date of this Consent Order, the Company shall pay to the General Fund of the State of Michigan, in the form of a check made payable to the "State of Michigan" and delivered to the Michigan Department of Environmental Quality, Financial and Business Services Division, Revenue Control, P.O. Box 30657, Lansing, Michigan 48909-8157, a settlement amount of \$35,000.00 which includes AQD costs for investigation and enforcement. This total settlement amount shall be paid within thirty (30) days of the effective date of this Consent Order. To ensure proper credit, all payments made pursuant to this Consent Order shall include the Agreement Identification No. AQD40007 on the face of the check. This settlement amount is in addition to any fees, taxes, or other fines that may be imposed on the Company by law.

16. On and after the effective date of this Consent Order, if the Company fails to comply with paragraph 9 or 10 of this Consent Order, the Company is subject to a stipulated fine of up to \$500.00 per violation per day. On and after the effective date of this Consent Order, if the Company fails to comply with any other provision of this Consent Order except Paragraph 9, 10 and 11, the Company is subject to a stipulated fine of up to \$250.00 per violation. The amount of the stipulated fines imposed pursuant to this paragraph shall be within the discretion of the MDEQ. Stipulated fines submitted under this Consent Order shall be by check, payable to the State of Michigan within thirty (30) days of written demand and shall be delivered to the Michigan Department of Environmental Quality, Financial and Business Services Division, Revenue Control, P.O. Box 30657, Lansing, Michigan 48909-8157. To ensure proper credit, all payments shall include the Agreement Identification No. AQD40007-S on the face of the check. Payment of stipulated fines shall not alter or modify in any way the Company's obligation to comply with the terms and conditions of this Consent Order.

17. The AQD, at its discretion, may seek stipulated fines or statutory fines for any violation of this Consent Order which is also a violation of any provision of applicable federal and state law, rule, regulation, permit, or MDEQ administrative order. However, the AQD is precluded from seeking both a stipulated fine under this Consent Order and a statutory fine for the same violation.

18. To ensure timely payment of the settlement amount assessed in paragraph 15 and any stipulated fines assessed pursuant to paragraph 16 of this Consent Order, the Company shall pay an

interest penalty to the State of Michigan each time it fails to make a complete or timely payment under this Consent Order. The interest payment shall be determined at a rate of interest that is equal to one percent (1%) plus the average interest rate paid at auctions of 5-year United States treasury notes during the six months immediately preceding July 1 and January 1, as certified by the state treasurer, compounded annually, and using the full increment of amount due as principal, calculated from the due date specified in this Consent Order until the date that delinquent payment is finally paid in full. Payment of an interest penalty by the Company shall be made to the State of Michigan in accordance with paragraph 16 of this Consent Order. Interest payments shall be applied first towards the most overdue amount or outstanding interest penalty owed by the Company before any remaining balance is applied to subsequent payment amount or interest penalty.

19. The Company agrees not to contest the legal basis for the settlement amount assessed pursuant to paragraph 15. The Company also agrees not to contest the legal basis for any stipulated fines assessed pursuant to paragraph 16 of this Consent Order, but reserves the right to dispute in a court of competent jurisdiction the factual basis upon which a demand by MDEQ of stipulated fines is made. In addition, the Company agrees that said fines have not been assessed by the MDEQ pursuant to Section 5529 of Part 55 and therefore are not reviewable under Section 5529 of Part 55.

20. This compliance program is not a variance subject to the 12 month limitation specified in Section 5538 of Part 55.

21. This Consent Order shall remain in full force and effect for a period of at least two (2) years. Thereafter, the Consent Order shall terminate only upon written notice of termination issued by the AQD Chief. Prior to issuance of a written notice of termination, the Company shall submit a request, to the AQD Chief at the Michigan Department of Environmental Quality, Air Quality Division, P.O. Box 30260, Lansing, Michigan 48909-7760, consisting of a written certification that the Company has fully complied with all the requirements of this Consent Order and has made all payments including all stipulated fines required by this Consent Order. Specifically, this certification shall include: (i) the date of compliance with each provision of the compliance program and the date any payments or stipulated fines were paid; (ii) a statement that all required information has been reported to the AQD Southeast Michigan District Supervisor; (iii) confirmation that all records required to be maintained pursuant to this Consent Order are being maintained at the facility; and, (iv) such information as may be requested by the AQD Chief.

22. In the event Henry Ford West Bloomfield Hospital sells or transfers the facility, with SRN P0336, it shall advise any purchaser or transferee of the existence of this Consent Order in connection with such sale or transfer. Within thirty (30) calendar days, the Company shall also notify the AQD Southeast Michigan District Supervisor, in writing, of such sale or transfer, the identity and address of any purchaser or transferee, and confirm the fact that notice of this Consent Order has been given to the purchaser and/or transferee. As a condition of the sale, the Henry Ford West Bloomfield Hospital must obtain the consent of the purchaser and/or transferee, in writing, to assume all of the obligations of this Consent Order. A copy of that agreement shall be forwarded to the AQD Southeast Michigan District Supervisor within thirty (30) days of assuming the obligations of this Consent Order.

23. Prior to the effective date of this Consent Order and pursuant to the requirements of Sections 5511 and 5528(3) of Part 55, the public was notified of a 30-day public comment period and was provided the opportunity for a public hearing.

24. Section 5530 of Part 55 may serve as a source of authority but not a limitation under which the Consent Order may be enforced. Further, Part 17 of Act 451 and all other applicable laws and any other legal basis or applicable statute may be used to enforce this Consent Order.

25. The Company hereby stipulates that entry of this Consent Order is a result of an action by MDEQ to resolve alleged violations of its facility located at 6777 West Maple Road in West Bloomfield, Michigan. The Company further stipulates that it will take all lawful actions necessary to fully comply with this Consent Order, even if the Company files for bankruptcy in the future. The Company will not seek discharge of the settlement amount and any stipulated fines imposed hereunder in any future bankruptcy proceedings, and the Company will take necessary steps to ensure that the settlement amount and any future stipulated fines are not discharged. The Company, during and after any future bankruptcy proceedings, will ensure that the settlement amount and any future stipulated fines remain an obligation to be paid in full by the Company to the extent allowed by applicable bankruptcy law.

The undersigned certifies that he/she is fully authorized by the Company to enter into this Consent Order and to execute and legally bind the Company to it.

HENRY FORD HEALTH SYSTEM d/b/a/ HENRY FORD WEST BLOOMFIELD HOSPITAL

Marco Capicchioni, VP
Print Name and Title

[Signature] Date: 3/22/13
Signature

The above signatory subscribed and sworn to before me this 22 day of March, 2013.

[Signature]
Notary Public

Approved as to Content:

[Signature]
G. Vinson Hellwig, Chief
AIR QUALITY DIVISION
DEPARTMENT OF
ENVIRONMENTAL QUALITY

Approved as to Form:

[Signature]
Neil Gordon, Section Head
ENVIRONMENTAL REGULATION SECTION
ENVIRONMENT, NATURAL RESOURCES,
AND AGRICULTURE DIVISION
DEPARTMENT OF ATTORNEY GENERAL

Dated: 4/3/13

Dated: April 1, 2013

FINAL ORDER

The Chief of the Air Quality Division having had opportunity to review the Consent Order and having been delegated authority to enter into Consent Orders by the Director of the Michigan Department of Environmental Quality pursuant to the provisions of Part 55 of Act 451 and otherwise being fully advised on the premises,

HAS HEREBY ORDERED that the Consent Order is approved and shall be entered in the record of the MDEQ as a Final Order.

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY



G. Vinson Hellwig, Chief
Air Quality Division

Effective Date: 4/3/13

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

In the matter of administrative proceedings)
against HENRY FORD HEALTH SYSTEM d/b/a)
HENRY FORD WEST BLOOMFIELD HOSPITAL,)
a corporation organized under the laws of the)
State of Michigan and doing business at)
6777 West Maple Road in the Township of)
West Bloomfield, County of Oakland, State of)
Michigan)

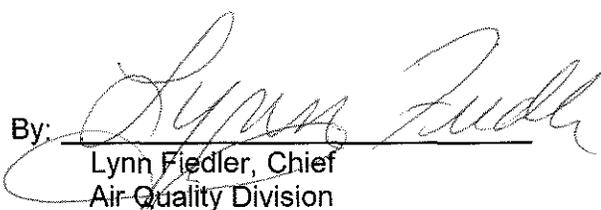
AQD No. 1-2013

SRN: P0336

NOTICE OF TERMINATION

This Notice is issued pursuant to a request for termination submitted by Henry Ford Health System, d/b/a/ Henry Ford West Bloomfield Hospital, pursuant to paragraph 21 of the Stipulation for Entry of Final Order by Consent (Consent Order), AQD No. 1-2013. The request contained supporting information as required by paragraph 21 of AQD No. 1-2013. Review of this request and supporting information indicates that Henry Ford Health System, d/b/a/ Henry Ford West Bloomfield Hospital achieved compliance with the terms and requirements of the Consent Order.

THEREFORE, effective on the date signed below, AQD No. 1-2013 is terminated. The Michigan Department of Environmental Quality reserves the right to pursue administrative, civil and/or criminal proceedings, including the assessment of monetary fines, for any falsification of information submitted in support of Henry Ford Health System, d/b/a/ Henry Ford West Bloomfield Hospital's request for termination of the Consent Order AQD No. 1-2013, or for any violation of the Michigan Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, MCL 324.5501 *et seq.*; and all other applicable laws.

By: 

Lynn Fiedler, Chief
Air Quality Division
Michigan Department of
Environmental Quality

Dated: 4/29/16

EXHIBIT A

ATTACHED PTI 72-12

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

September 12, 2012

PERMIT TO INSTALL
72-12

ISSUED TO
Henry ford West Bloomfield Hospital

LOCATED AT
6777 West Maple Road
West Bloomfield, Michigan

IN THE COUNTY OF
Oakland

STATE REGISTRATION NUMBER
P0336

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environmental Quality. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203:

June 13, 2012

DATE PERMIT TO INSTALL APPROVED:

September 12, 2012

SIGNATURE:

DATE PERMIT VOIDED:

SIGNATURE:

DATE PERMIT REVOKED:

SIGNATURE:

PERMIT TO INSTALL

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Common Abbreviations / Acronyms

Common Acronyms		Pollutant / Measurement Abbreviations	
AQD	Air Quality Division	BTU	British Thermal Unit
BACT	Best Available Control Technology	°C	Degrees Celsius
CAA	Clean Air Act	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	dscf	Dry standard cubic foot
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter
CO ₂ e	Carbon Dioxide Equivalent	°F	Degrees Fahrenheit
COM	Continuous Opacity Monitoring	gr	Grains
EPA	Environmental Protection Agency	Hg	Mercury
EU	Emission Unit	hr	Hour
FG	Flexible Group	H ₂ S	Hydrogen Sulfide
GACS	Gallon of Applied Coating Solids	hp	Horsepower
GC	General Condition	lb	Pound
GHGs	Greenhouse Gases	kW	Kilowatt
HAP	Hazardous Air Pollutant	m	Meter
HVLP	High Volume Low Pressure *	mg	Milligram
ID	Identification	mm	Millimeter
LAER	Lowest Achievable Emission Rate	MM	Million
MACT	Maximum Achievable Control Technology	MW	Megawatts
MAERS	Michigan Air Emissions Reporting System	ng	Nanogram
MAP	Malfunction Abatement Plan	NO _x	Oxides of Nitrogen
MDEQ	Michigan Department of Environmental Quality (Department)	PM	Particulate Matter
MSDS	Material Safety Data Sheet	PM10	PM less than 10 microns diameter
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM2.5	PM less than 2.5 microns diameter
NSPS	New Source Performance Standards	pph	Pounds per hour
NSR	New Source Review	ppm	Parts per million
PS	Performance Specification	ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight
PTE	Permanent Total Enclosure	psia	Pounds per square inch absolute
PTI	Permit to Install	psig	Pounds per square inch gauge
RACT	Reasonably Available Control Technology	scf	Standard cubic feet
ROP	Renewable Operating Permit	sec	Seconds
SC	Special Condition	SO ₂	Sulfur Dioxide
SCR	Selective Catalytic Reduction	THC	Total Hydrocarbons
SRN	State Registration Number	tpy	Tons per year
TAC	Toxic Air Contaminant	µg	Microgram
TEQ	Toxicity Equivalence Quotient	VOC	Volatile Organic Compound
VE	Visible Emissions	yr	Year

* For High Volume Low Pressure (HVLP) applicators, the pressure measured at the HVLP gun air cap shall not exceed ten (10) pounds per square inch gauge (psig).

GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. **(R 336.1201(1))**
2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. **(R 336.1201(4))**
3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to R 336.1210, operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. **(R 336.1201(6)(b))**
4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. **(R 336.1201(8), Section 5510 of Act 451, PA 1994)**
5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to R 336.1219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of R 336.1219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. **(R 336.1219)**
6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. **(R 336.1901)**
7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). **(R 336.1912)**
8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of R 336.1301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with R 336.1303. **(R 336.1301)**
 - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
 - b) A visible emission limit specified by an applicable federal new source performance standard.
 - c) A visible emission limit specified as a condition of this Permit to Install.

12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R 336.1370(2). **(R 336.1370)**

13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. **(R 336.2001)**

SPECIAL CONDITIONS

EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
EUBOILER1	Natural gas fired firetube boiler with a heat input of 12 million Btu per hour, capable of firing fuel oil.	March 2009	FGBOILERS
EUBOILER2	Natural gas fired firetube boiler with a heat input of 42 million Btu per hour, capable of firing fuel oil.	March 2009	FGBOILERS
EUBOILER3	Natural gas fired firetube boiler with a heat input of 42 million Btu per hour, capable of firing fuel oil.	March 2009	FGBOILERS
EUBOILER4	Natural gas fired firetube boiler with a heat input of 42 million Btu per hour, capable of firing fuel oil.	March 2009	FGBOILERS
EUENGINE1	Diesel fired emergency generator with a 2 MW output, manufactured on April 3, 2006	2008	.NA
EUENGINE2	Diesel fired emergency generator with a 2 MW output, manufactured on March 28, 2006	2008	FGENGINES
EUENGINE3	Diesel fired emergency generator with a 2 MW output, manufactured on March 28, 2006	2008	FGENGINES
Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1290.			

The following conditions apply to: EUENGINE1

DESCRIPTION: A 2000 kilowatts (kW) diesel-fueled emergency engine manufactured in April 2006.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT:

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. NOx	6.9 g/hp-hr	Test Protocol*	EUENGINE1	SC VI.2	40 CFR 60.4205
2. HC	0.2 g/hp-hr	Test Protocol*	EUENGINE1	SC VI.2	40 CFR 60.4205
3. CO	0.9 g/hp-hr	Test Protocol*	EUENGINE1	SC VI.2	40 CFR 60.4205
4. PM	0.1 g/hp-hr	Test Protocol*	EUENGINE1	SC VI.2	40 CFR 60.4205

*Test Protocol shall determine averaging time.

II. MATERIAL LIMITS

1. The permittee shall burn only diesel fuel, in EUENGINE1 with the maximum sulfur content of 15 ppm (0.0015 percent) by weight. (R 336.1205(1)(a) and (3), R 336.1402(1), 40 CFR 60.4207, 40 CFR 80.510(b))

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate EUENGINE1 for more than 500 hours per year on a 12-month rolling time period basis as determined at the end of each calendar month. The 500 hours includes the 100 hours for the purpose of necessary maintenance checks and readiness testing as described in SC III.2. (R 336.1205 (3), R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))
2. The permittee may operate EUENGINE1 for no more than 100 hours per 12-month rolling time period as determined at the end of each calendar month for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per year. EUENGINE1 may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply non-emergency power as part of a financial arrangement with another entity. (40 CFR 60.4211)
3. The permittee shall install, maintain, and operate each of EUENGINE1 according to the manufacturer written instructions, or procedures developed by the owner/operator and approved by the engine manufacturer, over the entire life of the engine. (R 336.1205(1)(a) & (3), R 336.1225, R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d), 40 CFR 60.4206, 40 CFR 60.4211)

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall equip and maintain each EUENGINE1 with non-resettable hours meters to track the operating hours. (R 336.1205(1)(a) & (3), R 336.1225, 40 CFR 60.4209)
2. The nameplate capacity of EUENGINE1 shall not exceed 2000 kW, as certified by the equipment manufacturer. (R 336.1205(1)(a) & (3), 40 CFR 60.4202)

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. The permittee shall conduct an initial performance test for EUENGINE1 within one year after permit issuance to demonstrate compliance with the emission limits in 40 CFR 60.4205 unless the engines have been certified by the manufacturer and the permittee maintains the engine as required by 40 CFR Part 60 Subpart IIII. If a performance test is required, the performance tests shall be conducted according to 40 CFR 60.4212. No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. (40 CFR 60.4211, 40 CFR 60.4212, 40 CFR Part 60 Subpart IIII)

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205(1)(a) & (3), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))
2. The permittee shall keep, in a satisfactory manner, a record of testing required in SC V.1 or manufacturer certification documentation indicating that EUENGINE1 meets the applicable emission limitations contained in the federal Standards of Performance for New Stationary Sources 40 CFR Part 60 Subpart IIII. The permittee shall keep all records on file and make them available to the Department upon request. (40 CFR 60.4211)
3. The permittee shall monitor and record the total hours of operation and the hours of operation during non-emergencies for EUENGINE1, on a monthly and 12-month rolling time period basis, in a manner acceptable to the District Supervisor, Air Quality Division. The permittee shall document how many hours are spent for emergency operation of EUENGINE1, including what classified the operation as emergency and how many hours are spent for non-emergency operation. (R 336.1205(1)(a) & (3), 40 CFR 60.4211, 40 CFR 60.4214)
4. The permittee shall keep, in a satisfactory manner, fuel supplier certification records or fuel sample test data, for each delivery of diesel fuel oil used in EUENGINE1, demonstrating that the fuel sulfur content meets the requirement of 40 CFR 80.510(b). The certification or test data shall include the name of the oil supplier or laboratory, and the sulfur content of the fuel oil. (R 336.1205(1)(a) & (3), R 336.1402(1), 40 CFR 80.510(b))

VII. REPORTING

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EUENGINE1. (R 336.1201(7)(a))

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter/ Dimensions (Inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVENGINE1	18	69.5	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENTS

1. The permittee shall comply with the provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subpart A and Subpart IIII, as they apply to EUENGINE1. (40 CFR Part 60 Subparts A & IIII)
2. The permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR, Part 63, Subpart A and Subpart ZZZZ, as they apply to EUENGINE1. (40 CFR Part 63 Subparts A and ZZZZ, 40 CFR 63.6595)

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGBOILERS	One (1) 12 million Btu per hour and three (3) 42 million Btu per hour natural gas fired firetube boilers, capable of firing fuel oil.	EUBOILER1 EUBOILER2 EUBOILER3 EUBOILER4
FGENGINES	Two (2) Diesel fired emergency generators with each having a 2 MW output.	EUENGINE2 EUENGINE3

The following conditions apply to: FGBOILERS

DESCRIPTION: One (1) 12 million Btu per hour and three (3) 42 million Btu per hour natural gas fired firetube boilers, capable of firing fuel oil.

Emission Units: EUBOILER1, EUBOILER2, EUBOILER3, EUBOILER4

POLLUTION CONTROL EQUIPMENT: N/A

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. NOx	36.75 tpy	12-Month rolling time period determine at the end of each calendar month	Collectively, for all units in FGBOILERS	SC V.1 SC VI.2	R 336.1205 (1)(a) R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d)
2. NOx (natural gas only)	1.48 pph	Test Protocol*	EUBOILER2, EUBOILER3, & EUBOILER4 of FGBOILERS (emissions per unit)	SC V.1 SC VI.2	R 336.1205 (1)(a) R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d)
3. NOx (diesel fuel only)	5.86 pph	Test Protocol*	EUBOILER2, EUBOILER3, & EUBOILER4 of FGBOILERS (emissions per unit)	SC V.1 SC VI.2	R 336.1205 (1)(a) R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d)
4. NOx (natural gas only)	0.42 pph	Test Protocol*	EUBOILER1 of FGBOILERS	SC V.1 SC VI.2	R 336.1205 (1)(a) R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d)
5. NOx (diesel fuel only)	1.68 pph	Test Protocol*	EUBOILER1 of FGBOILERS	SC V.1 SC VI.2	R 336.1205 (1)(a) R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
6. PM	0.027 lbs/1000 lbs of gas	Test Protocol*	Each unit in FGBOILERS	SC V.1 SC VI.2	R 336.1331 40 CFR 52.21 (c) & (d)
7. PM (natural gas only)	0.42 pph	Test Protocol*	EUBOILER2, EUBOILER3, & EUBOILER4 of FGBOILERS (emissions per unit)	SC V.1 SC VI.2	R 336.1205 (1)(a) 40 CFR 52.21 (c) & (d)
8. PM (diesel fuel only)	1.52 pph	Test Protocol*	EUBOILER2, EUBOILER3, & EUBOILER4 of FGBOILERS (emissions per unit)	SC V.1 SC VI.2	R 336.1205 (1)(a) 40 CFR 52.21 (c) & (d)
9. PM10	1.52 pph	Test Protocol*	EUBOILER2, EUBOILER3, & EUBOILER4 of FGBOILERS (emissions per unit)	SC V.1 SC VI.2	R 336.1205 (1)(a) 40 CFR 52.21 (c) & (d)

*Test Protocol shall determine averaging time.

II. MATERIAL LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Fuel Oil	383,250 gallons per year	12-month rolling time period	EUBOILER1 of FGBOILERS	SC VI.2	R 336.1205 (1)(a) & (3) R 336.1225 40 CFR 52.21 (c) & (d)
2. Fuel Oil	2,620,000 gallons per year	12-month rolling time period	EUBOILER2, EUBOILER3, & EUBOILER4 of FGBOILERS (collectively)	SC VI.2	R 336.1205 (1)(a) & (3) R 336.1225 40 CFR 52.21 (c) & (d)
3. Natural Gas	103.1 MMcft/yr	12-month rolling time period	EUBOILER1 of FGBOILERS	SC VI.2	R 336.1205 (1)(a) & (3) R 336.1225 40 CFR 52.21 (c) & (d)
4. Natural Gas	721.5 MMcft/yr	12-month rolling time period	EUBOILER2, EUBOILER3, & EUBOILER4 of FGBOILERS (collectively)	SC VI.2	R 336.1205 (1)(a) & (3) R 336.1225 40 CFR 52.21 (c) & (d)

5. The permittee shall not operate more than two (2) of the following units at any time: EUBOILER2, EUBOILER3, and EUBOILER4. (R 336.1205 (1)(a) & (3), R 336.1225, 40 CFR 52.21 (c) & (d))
6. The permittee shall burn only pipeline quality natural gas and diesel fuel in FGBOILERS. (R 336.1225, R 336.1702, 40 CFR Part 60 Subpart Dc)
7. The permittee shall burn diesel fuel, in FGBOILERS with the maximum sulfur content of 0.01 percent by weight. (R 336.1225, R 336.1402(1), 40 CFR 52.21 (c) & (d), 40 CFR Part 60 Subpart Dc)

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall operate each unit in FGBOILERS in accordance with manufacturer's recommendations for safe and proper operation to minimize emissions during periods of startup, shutdown and malfunction. (R 336.1912)

IV. DESIGN/EQUIPMENT PARAMETERS

1. The heat input capacity of each unit in FGBOILERS shall not exceed a maximum of 42 million BTU per hour each. (R 336.1205 (1)(a) & (3), R 336.1225)
2. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor and record the fuel use for each unit in FGBOILERS on a monthly basis. (R 336.1205 (1)(a) & (3), R 336.1225)

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. Upon request from the district supervisor, the permittee shall verify NO_x, PM, and PM-10 emission rates from FGBOILERS, by testing at owner's expense. No less than 60 days prior to testing, the permittee must submit a complete stack-testing plan to the AQD. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. (R 336.1205 (1)(a), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))
2. The permittee shall keep, in a satisfactory manner, monthly fuel use records for each unit in FGBOILERS. The records must indicate the type and total amount of each fuel used monthly in each unit in FGBOILERS. All records shall be kept on file and made available to the Department upon request. (R 336.1205 (1)(a) & (3), R 336.1225, 40 CFR 60.48c(g))
3. The permittee shall monitor and record the hours of operation of each unit in FGBOILERS, on a monthly and 12- month rolling time period basis to show compliance with SC. II.5, in a manner that is acceptable to the District Supervisor, Air Quality Division. All records shall be kept on file and made available to the Department upon request. (R 336.1205 (1)(a) & (3), R 336.1225, 40 CFR 52.21 (c) & (d))
4. The permittee shall keep, in a satisfactory manner, fuel supplier certification records or fuel sample test data, for each delivery of diesel fuel oil used in each unit in FGBOILERS, demonstrating that the fuel sulfur content meets the requirement of SC II.7. The certification or test data shall include the name of the oil supplier or laboratory, and the sulfur content of the fuel oil. (R 336.1402(1))
5. The permittee shall keep, in a satisfactory manner, monthly NO_x emission calculations for each unit in FGBOILERS. All records shall be kept on file and made available to the Department upon request. (R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVBOILER1	20	69.5	R 336.1225
2. SVBOILER2	36	69.5	R 336.1225
3. SVBOILER3	36	69.5	R 336.1225
4. SVBOILER4	36	69.5	R 336.1225

IX. OTHER REQUIREMENTS

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and Dc, as they apply to FGBOILERS. (40 CFR Part 60 Subparts A & Dc)
2. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63 Subparts A and JJJJJ, as they apply to FGBOILERS. (40 CFR Part 63 Subparts A & JJJJJ)

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

The following conditions apply to: FGENGINES

DESCRIPTION: Two (2) 2,000 kilowatts (kW) diesel-fueled emergency engines manufactured on March 28, 2006.

EMISSION UNITS: EUENGINE2, EUENGINE3

POLLUTION CONTROL EQUIPMENT:

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. NO _x	6.9 g/hp-hr	Test Protocol*	FGENGINES (emissions per unit)	SC V.1 SC VI.2	R 336.1205(1)(a) R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d)
2. CO	0.9 g/hp-hr	Test Protocol*	FGENGINES (emissions per unit)	SC V.1 SC VI.2	R 336.1205(1)(a) R 336.2804 40 CFR 52.21 (d)

*Test Protocol shall determine averaging time.

II. MATERIAL LIMITS

1. The permittee shall burn only diesel fuel, in FGENGINES with the maximum sulfur content of 15 ppm (0.0015 percent) by weight. (R 336.1205(1)(a), R 336.1402(1))

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate each unit in FGENGINES for more than 500 hours per year each on a 12-month rolling time period basis as determined at the end of each calendar month. ((R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))
2. The permittee shall install, maintain, and operate FGENGINES according to the manufacturer written instructions, or procedures developed by the owner/operator and approved by the engine manufacturer, over the entire life of the engine. (R 336.1205(1)(a) & (3), R 336.1225, R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall equip and maintain each unit of FGENGINES with non-resettable hours meters to track the operating hours. (R 336.1205(1)(a) & (3))
2. The nameplate capacity of each unit in FGENGINES shall not exceed 2000 kW, as certified by the equipment manufacturer. (R 336.1205(1)(a) & (3))

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. Upon request from the district supervisor, the permittee shall verify NO_x and CO emission rates from FGENGINES, by testing at owner's expense, in accordance with Department requirements or by providing documentation as required in SC VI.2. No less than 60 days prior to testing, the permittee must submit a complete stack-testing plan to the AQD. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. (R 336.2001, R 336.2003, R 336.2004)

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205(1)(a) & (3), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))
2. The permittee shall keep records of performance test results indicating that each unit in FGENGINES meets the applicable emission limitations contained SC I.1 and SC I.2. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(1)(a) & (3))
3. The permittee shall monitor and record the hours of operation of each unit in FGENGINES, on a monthly and 12- month rolling time period basis, in a manner that is acceptable to the District Supervisor, Air Quality Division. (R 336.1205(1)(a) & (3))
4. The permittee shall keep, in a satisfactory manner, fuel supplier certification records or fuel sample test data, for each delivery of diesel fuel oil used in each unit of FGENGINES, demonstrating that the fuel sulfur content meets the requirement of SC II.1. The certification or test data shall include the name of the oil supplier or laboratory, and the sulfur content of the fuel oil. (R 336.1205(1)(a) & (3), R 336.1402)

VII. REPORTING

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation for each unit in FGENGINES. (R 336.1201(7)(a))

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter/ Dimensions (Inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVENGINE2	18	69.5	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
2. SVENGINE3	18	69.5	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENTS

1. The permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR, Part 63, Subpart A and Subpart ZZZZ, as they apply to FGENGINES. (40 CFR Part 63 Subparts A and ZZZZ, 40 CFR 63.6595)

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

EXHIBIT B

SUPPLEMENTAL ENVIRONMENTAL PROJECTS 1, 2 and 3

1. Electric Vehicle Charging Infrastructure Solution (EV Charging Station)
2. Plug-In Hybrid Vehicle Purchase
3. LED Replacement of Specific Existing Parking Lot and Interior Lamps with LED Lighting

Refer to the following letters from Henry Ford Health System; West Bloomfield Hospital describing each SEP.

The following comments were received during public comment period of February 11, 2013 to March 13, 2013, and were found acceptable by the MDEQ and the Company and incorporated and made enforceable under this Consent Order.

(1) Electric Vehicle Charging Infrastructure Solution (EV Charging Station)

New Project Schedule: the electric vehicle charging stations would be expected to be installed within 8 weeks of entry of the Consent Order.

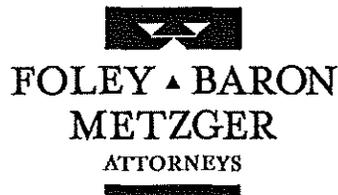
(2) Plug-In Hybrid Vehicle Purchase

New Project Schedule: the hybrid vehicle would be expected to be purchased within 8 weeks of entry of the Consent Order.

(3) LED Replacement of Specific Existing Parking Lot Interior Lamps with LED Lighting

New Project Schedule: The outdoor portion of the LED lighting project will require approval from the Township of West Bloomfield. The lighting vendor, Lumerica, intends to develop a lighting plan to submit to the Township by the end of March 2013. While we cannot control the time frame in which the Township will review the lighting plan, we anticipate that it will make a decision within 4 – 6 weeks after the plan is submitted (i.e. approximately mid-May 2013).

Once the project is approved, Lumerica anticipates an additional 4 – 6 weeks will be required for delivery and installation of the lights. Based on this schedule, we anticipate the project would be complete by the end of June 2013. This schedule may be subject to change based on conditions beyond the control of HFHS.



December 10, 2012

*Via Email (kovalchickm@michigan.gov)
and First Class Mail*

Mike Kovalchick
Air Quality Division
Michigan Department of Environmental Quality
P.O. Box 30260
Lansing, MI 48909-7760

**Re: Henry Ford Health System West Bloomfield Hospital, SRN: P0336
Enforcement Notice Dated June 21, 2012 and
Violation Notice, dated May 3, 2012
Proposed Supplemental Environmental Project (SEP)**

Dear Mr. Kovalchick:

In accordance with our prior communications regarding Henry Ford Health System's ("HFHS") request to submit a proposed SEP relating to the above-noted violations, we ask that the Michigan Department of Environmental Quality ("MDEQ") approve HFHS's proposed SEP outlined below. As noted in the MDEQ Policy Documents re: SEPs, November 10, 1997, as revised, Number: 04-002, the SEP proposal is conditioned upon the MDEQ and HFHS reaching an agreement on the SEP language and other compliance provisions to resolve the violations alleged by MDEQ against HFHS. The SEP submitted is part of an overall discussion regarding Consent Order language and extent of fines and penalties.

1. Name and Location of Entity Subject to the Enforcement Action

Henry Ford Health System d/b/a Henry Ford West Bloomfield Hospital, 6777 West Maple Road, West Bloomfield, Oakland County, Michigan ("Hospital").

2. Regulatory Information

The MDEQ alleges that the Hospital is in violation of the Michigan Administrative Code (MAC), 2001 AACS, R 336.1210, Prevention of Significant Deterioration (PSD) 40 Code of Federal Regulations (CFR) 52.21, New Source Performance Standards (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units 40 CFR 60, Subparts A and Dc, NSPS for Stationary Compression Ignition and Spark Ignition Internal Combustions 40 CFR Part 60, Subparts A, III (41), and MAC, 2008, AACS, R 336.1201.

- Specifically, the MDEQ alleges the Hospital installed 4 steam boilers and 3 diesel emergency generators without first obtaining a Permit to Install (PTI) Permit, a Renewable Operating Permit (ROP), complying with the NSPS for boilers/generators, or properly limiting potential to emit of nitrogen oxide emissions to avoid being subject to PSD as cited in the Violation Notice dated May 3, 2012.

Henry Ford West Bloomfield Hospital (P0336); Permit No. 72-12.

3. Project Name

Electric Vehicle Charging Infrastructure Solution (EV Charging Station); Supplemental Environmental Project for Henry Ford West Bloomfield Hospital. 6777 West Maple Road, West Bloomfield, MI 48322.

4. Project Manager

Marco Capicchioni
1 Ford Place
Suite 4A
Detroit, MI 48202
(313) 876-9884
FAX: (313) 874-4035
MCAPICC1@hfhs.org

5. DEQ Contact Person

None.

6. Geographical Area to Benefit from the Project

Southeast Michigan Air Basin, with specific work to be performed at:
Henry Ford West Bloomfield Hospital, 6777 West Maple Road, West Bloomfield, MI 48322

7. SEP Categories

This proposal for two EV Charging Stations meets the following SEP Categories:

- **Pollution Prevention:** this project is designed to substantially reduce and/or prevent the generation of pollutants through the use of alternative energy (i.e. installation of electric vehicle charging stations). The U.S. EPA has determined that energy efficiency projects are appropriate SEPs since they displace the use of fossil fuels to provide energy.¹
- **Pollution Reduction:** Energy efficiency projects displace emissions associated with the displaced energy generation, including oxides of nitrogen (NOx), sulfur

¹ See U.S. EPA Memorandum, "A Toolkit for States: Using Supplemental Environmental Projects (SEPs) to Promote Energy Efficiency (EE) and Renewable Efficiency (RE)", dated January 27, 2005.

dioxide (SO₂), mercury (Hg) and other metals, carbon monoxide (CO), as well as carbon dioxide (CO₂).²

- Public Health: Energy efficiency projects can achieve multi-media and multi-pollutant emission reductions and can enhance a local community economically as well as environmentally.³
- Environmental Awareness

8. Project Description

This SEP consists of the installation of two electric vehicle charging stations (capacity for 4 vehicles simultaneously) at the Henry Ford West Bloomfield Hospital. The specific location planned is along the main entrance drive, north of the existing building at the northwest corner of building near the Williams International Cancer Center.

The electric vehicle charging stations would include the installation of two model PS1500 Commercial Dual Port Charging Stations provided by PEP Stations, LLC.

9. Expected Environmental Benefits

The installation of the electric vehicle charging stations would decrease the use of fossil fuels in electric vehicles used by staff and visitors. Virtually all fossil fuel vehicles use either gasoline or diesel, while LNG vehicles exist, they are rare. One perspective on perceived benefits of EV use is attached and may be found at: <http://www.sierraclub.org/electric-vehicles/myths.aspx>

For ease of review, this SEP proposal discusses environmental benefits following the MDEQ format for a SEP Quality Rating contained in DEQ Policy and Procedures regarding SEPS.

Public Benefit: Increase public awareness of alternative technologies for transportation-related energy sources and decrease fossil fuel used for direct consumption as a liquid energy source. Electricity may be generated through sources other than fossil fuels in comparison with virtually all vehicle liquid fuels being fossil fuel derived. This will help decrease gasoline emissions, including BTEX and other air pollutants. Transmission of electricity via transmission lines is more efficient than truck and tanker transport of liquid fossil fuels.

Innovative: EV's are an emerging technology. Difficulty in marketing pure EV's has been tied to lack of refueling (charging) locations. This location would be one of the first EV stations in the community. Improved fuel efficiency vehicles using fuel other than liquid results in decreased fuel spillage at all points in the process, trucking accidents and reduces the risk of soil and groundwater contamination.

² Id.

³ Id.

Pollution Prevention: See above. Fewer local air emissions. There is a high density of vehicle traffic in the Maple/Drake area due to a number of large facilities unrelated to the hospital. The increase in local EVs would assist in decreasing local air emissions. Electricity may be derived from non-fossil fuel sources.

Multi-media impact: Fuel spills, transport and delivery issues and air basin impacts may be reduced with increased use of EVs.

Environmental Justice: Liquid fuel storage facilities may be sited in areas of lower income housing or have disproportionate socio-economic impact. To the extent that either liquid fuels or overall energy needs are reduced, this SEP may assist with environmental justice concerns.

Community Input: The 30 day timeframe for SEP submittal by MDEQ was not sufficient for public outreach. The hospital has had employee requests for charging stations.

Project Budget

Henry Ford Health System is a domestic nonprofit corporation.

The costs related to the electric vehicle charging stations are as follows:

- Initial Costs = \$17,875.72 (2 Charging Stations)
\$9,000 (Electric line installation calculated at \$30/foot x 300 feet)
\$7,500 (Concrete work)
Total = \$34,375.72⁴
- Capital Costs = \$17,875.72 (Fixtures)
- Useful Life = (*Information from manufacturer was not available*)
- One-time, non-depreciable costs = \$9,000 (Electric line installation)
\$7,500 (Concrete work)
Total = \$16,500
- Annual Savings = \$0

10. Project Schedule

⁴ Yearly maintenance after year 1 = \$180

The electric vehicle charging stations would be expected to be installed by March 5, 2013. The order for the EV stations would be made within one week of SEP approval by the MDEQ.

11. Accounting

This section is inapplicable since no third party would be involved in the project implementation.

12. Reporting

HFHS will submit a report to the MDEQ within ten (10) days of the completion of each phase of this SEP. The report will consist of a summary of the tasks completed, vendor receipts as well as photographs of the new EV Charging Stations.

13. Prior Commitments and/or Regulatory Requirements:

No local, state or federal regulations or binding private commitments would require the implementation of this project or any part thereof.

14. Certification of Expenditures

Attached is a separate certification from HFHS.

AQD No. 1-2013

We look forward to discussing these matters with you further.

Very truly yours,

FOLEY, BARON & METZGER, PLLC

Richard S. Baron

Richard S. Baron

Direct Dial: (734) 742-1855

Email: rbaron@fbmlaw.com

Brian H. Phinney

Direct Line: (734) 742-1860

Email: bphinney@fbmlaw.com

RSB/BHP/ceb

Attachments

cc: Jane Schelberg, Esq. (w/attachments) (via email)
Joe Urbas (w/attachments) (via email)
Marco Capicchioni (w/attachments) (via email)

CERTIFICATION

I, Marco Capicchioni, hereby certify that the proposed SEP is solely attributable to the settlement of the current enforcement action and that no funding has been budgeted to the installation of 2 EV Charging Stations at HF West Bloomfield Hospital prior to the approval of the project, nor is the proposed project funded by grants, donations, low interest loans, or other sources of funding not attributable to the alleged violator's normal budgetary process. The proposed project is not being done, nor will receive credit, as part of an environmental incentive or awards program offered by local, state or federal government, industry, etc.

Marco Capicchioni

Vice President, Facilities Real Estate
and Support Services for the Henry Ford
Health System and project manager for
the Henry Ford West Bloomfield
Hospital



**FOLEY • BARON
METZGER**
ATTORNEYS

January 2, 2013

Via Email (kovalchickm@michigan.gov)

Mike Kovalchick
Air Quality Division
Michigan Department of Environmental Quality
P.O. Box 30260
Lansing, MI 48909-7760

**Re: Henry Ford Health System West Bloomfield Hospital, SRN: P0336
Enforcement Notice Dated June 21, 2012 and
Violation Notice, dated May 3, 2012
Proposed Supplemental Environmental Project (SEP)**

Dear Mr. Kovalchick:

In accordance with our prior communications regarding Henry Ford Health System's ("HFHS") request to submit a proposed SEP relating to the above-noted violations, we ask that the Michigan Department of Environmental Quality ("MDEQ") approve HFHS's proposed SEP outlined below. As noted in the MDEQ Policy Documents re: SEPs, November 10, 1997, as revised, Number: 04-002, the SEP proposal is conditioned upon the MDEQ and HFHS reaching an agreement on the SEP language and other compliance provisions to resolve the violations alleged by MDEQ against HFHS. The SEP submitted is part of an overall discussion regarding Consent Order language and extent of fines and penalties.

15. Name and Location of Entity Subject to the Enforcement Action

Henry Ford Health System d/b/a Henry Ford West Bloomfield Hospital, 6777 West Maple Road, West Bloomfield, Oakland County, Michigan ("Hospital").

16. Regulatory Information

The MDEQ alleges that the Hospital is in violation of the Michigan Administrative Code (MAC), 2001 AACS, R 336.1210, Prevention of Significant Deterioration (PSD) 40 Code of Federal Regulations (CFR) 52.21, New Source Performance Standards (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units 40 CFR 60, Subparts A and Dc, NSPS for Stationary Compression Ignition and Spark Ignition Internal Combustions 40 CFR Part 60, Subparts A, III (41), and MAC, 2008, AACS, R 336.1201.

Specifically, the MDEQ alleges the Hospital installed 4 steam boilers and 3 diesel emergency generators without first obtaining a Permit to Install (PTI) Permit, a Renewable Operating Permit (ROP), complying with the NSPS for boilers/generators, or properly limiting potential to emit of nitrogen oxide emissions to avoid being subject to PSD as cited in the Violation Notice dated May 3, 2012.

Henry Ford West Bloomfield Hospital (P0336); Permit No. 72-12.

17. Project Name

Hybrid Vehicle Purchase; Supplemental Environmental Project for Henry Ford West Bloomfield Hospital. 6777 West Maple Road, West Bloomfield, MI 48322.

18. Project Manager

Marco Capicchioni
1 Ford Place
Suite 4A
Detroit, MI 48202
(313) 876-9884
FAX: (313) 874-4035
MCAPICC1@hfhs.org

19. DEQ Contact Person

None.

20. Geographical Area to Benefit from the Project

Southeast Michigan Air Basin, with specific work to be performed at:
Henry Ford West Bloomfield Hospital, 6777 West Maple Road, West Bloomfield, MI 48322

21. SEP Categories

This proposal for the Hybrid Vehicle Purchase meets the following SEP Categories:

- **Pollution Prevention:** this project is designed to substantially reduce and/or prevent the generation of pollutants through the use of alternative energy (i.e.

hybrid vehicle). The U.S. EPA has determined that energy efficiency projects are appropriate SEPs since they displace the use of fossil fuels to provide energy.⁵

- **Pollution Reduction:** Energy efficiency projects displace emissions associated with the displaced energy generation, including oxides of nitrogen (NOx), sulfur dioxide (SO₂), mercury (Hg) and other metals, carbon monoxide (CO), as well as carbon dioxide (CO₂).⁶
- **Public Health:** Energy efficiency projects can achieve multi-media and multi-pollutant emission reductions and can enhance a local community economically as well as environmentally.⁷
- **Environmental Awareness**

22. Project Description

This SEP consists of the purchase of a Ford Fusion plug-in hybrid vehicle for use at the Henry Ford West Bloomfield Hospital. This hybrid vehicle would replace a 2008 Ford Escape currently used for parking lot patrol and other campus-related services.

23. Expected Environmental Benefits

The use of the hybrid vehicle would decrease the use of fossil fuels currently used in the Hospital's Ford Escape.

For ease of review, this SEP proposal discusses environmental benefits following the MDEQ format for a SEP Quality Rating contained in DEQ Policy and Procedures regarding SEPS.

Public Benefit: Increase public awareness of alternative technologies for transportation-related energy sources and decrease fossil fuel used for direct consumption as a liquid energy source. Electricity may be generated through sources other than fossil fuels in comparison with virtually all vehicle liquid fuels being fossil fuel derived. This will help decrease gasoline emissions, including

⁵ See U.S. EPA Memorandum, "A Toolkit for States: Using Supplemental Environmental Projects (SEPs) to Promote Energy Efficiency (EE) and Renewable Efficiency (RE)", dated January 27, 2005.

⁶ Id.

⁷ Id.

BTEX and other air pollutants. Transmission of electricity via transmission lines is more efficient than truck and tanker transport of liquid fossil fuels.

Innovative: Hybrid vehicles are an emerging technology. Improved fuel efficiency vehicles using fuel other than liquid results in decreased fuel spillage at all points in the process, trucking accidents and reduces the risk of soil and groundwater contamination.

Pollution Prevention: See above. Fewer local air emissions. There is a high density of vehicle traffic in the Maple/Drake area due to a number of large facilities unrelated to the hospital. The use of a hybrid vehicle would assist in decreasing local air emissions.

Multi-media impact: Fuel spills, transport and delivery issues and air basin impacts may be reduced with the use of hybrid vehicles.

Environmental Justice: Liquid fuel storage facilities may be sited in areas of lower income housing or have disproportionate socio-economic impact. To the extent that either liquid fuels or overall energy needs are reduced, this SEP may assist with environmental justice concerns.

Community Input: We have not conducted any specific public outreach regarding this SEP. The hospital has had employee requests for charging stations.

Project Budget

Henry Ford Health System is a domestic nonprofit corporation.

The costs related to purchase of the Ford Fusion Plug-In Hybrid are as follows:

- Initial Costs = \$34,995 to \$36,995 depending on whether comes out of stock or is ordered.
- Capital Costs = (same)
- Useful Life = Approximately 10 years
- One-time, non-depreciable costs = (none)
- Annual Savings = \$ The 2008 Escape current used approximately 10 gallons of fuel per day or about 365 gallons/year. We aren't currently able to predict, based on expected usage patterns and ability to recharge the car between gasoline fill ups, the precise quantity of gasoline that will be able to be reduced.

According to "@FordOnline" The 2013 Ford Fusion was "voted Green Car of the Year" and "The EPA also certified Fusion Energi to deliver up to 92 MPGe highway and a combined 100 MPGe – figures that could potentially help save customers an estimated \$6,850 in fuel costs compared with an average new car over the course of five years." <http://www.at.ford.com/news/cn/Pages/Ford%20Fusion%20Energi%20PlugIn%20Hybrid>

[%20Rated%20Up%20to%20108%20MPGe%20City%20Making%20It%20Americas%20Most%20FuelEfficient%20Sedan%20Ford%20Projects%20B.aspx](#)

A 2008 Ford Escape FWD, 6cyl is reported as having a city mileage rating of 18.
<http://www.fueleconomy.gov/feg/bymake/Ford2008.shtml>

24. Project Schedule

The Hybrid Vehicle would be expected to be purchased in March 2013. The order for the Hybrid Vehicle would be made within one week of SEP approval by the MDEQ.

25. Accounting

This section is inapplicable since no third party would be involved in the project implementation.

26. Reporting

HFHS will submit a report to the MDEQ within ten (10) days of the completion of each phase of this SEP. The report will consist of a summary of the tasks completed, vendor receipts as well as photographs of the new vehicle.

27. Prior Commitments and/or Regulatory Requirements:

No local, state or federal regulations or binding private commitments would require the implementation of this project or any part thereof.

28. Certification of Expenditures

Attached is a separate certification from HFHS.

We look forward to discussing these matters with you further.

Very truly yours,

FOLEY, BARON, METZGER & JUIP, PLLC

Richard S. Baron

Richard S. Baron

Direct Dial: (734) 742-1855

Email: rbaron@fbmlaw.com

Brian H. Phinney

Direct Line: (734) 742-1860

Email: bphinney@fbmlaw.com

RSB/BHP/ceb

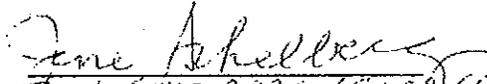
cc: Jane Schelberg, Esq. (via email)

Joe Urbas (via email)

Marco Capicchioni (via email)

CERTIFICATION

I, Marco Capicchioni, hereby certify that the proposed SEP is solely attributable to the settlement of the current enforcement action and that no funding has been budgeted to the installation of a Ford Fusion plug-in hybrid vehicle at HF West Bloomfield Hospital prior to the approval of the project, nor is the proposed project funded by grants, donations, low interest loans, or other sources of funding not attributable to the alleged violator's normal budgetary process. The proposed project is not being done, nor will receive credit, as part of an environmental incentive or awards program offered by local, state or federal government, industry, etc...


JANE SCHELLBERG, SENIOR COUNSEL FOR
Marco Capicchioni

Vice President, Facilities Real Estate
and Support Services for the Henry Ford
Health System and project manager for
the Henry Ford West Bloomfield
Hospital



**FOLEY & BARON
METZGER**
ATTORNEYS

December 10, 2012

*Via Email (kovalchickm@michigan.gov)
and First Class Mail*

Mike Kovalchick
Air Quality Division
Michigan Department of Environmental Quality
P.O. Box 30260
Lansing, MI 48909-7760

**Re: Henry Ford Health System West Bloomfield Hospital, SRN: P0336
Enforcement Notice Dated June 21, 2012 and
Violation Notice, dated May 3, 2012
Proposed Supplemental Environmental Project (SEP)**

Dear Mr. Kovalchick:

In accordance with our prior communications regarding Henry Ford Health System's ("HFHS") request to submit a proposed SEP relating to the above-noted violations, we ask that the Michigan Department of Environmental Quality ("MDEQ") approve HFHS's proposed SEP outlined below. As noted in the MDEQ Policy Documents re: SEPs, November 10, 1997, as revised, Number: 04-002, the SEP proposal is conditioned upon the MDEQ and HFHS reaching an agreement on the SEP language and other compliance provisions to resolve the violations alleged by MDEQ against HFHS. The SEP submitted is part of an overall discussion regarding Consent Order language and extent of fines and penalties.

29. Name and Location of Entity Subject to the Enforcement Action

Henry Ford Health System d/b/a Henry Ford West Bloomfield Hospital, 6777 West Maple Road, West Bloomfield, Oakland County, Michigan ("Hospital").

30. Regulatory Information

The MDEQ alleges that the Hospital is in violation of the Michigan Administrative Code (MAC), 2001 AACRS, R 336.1210, Prevention of Significant Deterioration (PSD) 40 Code of Federal Regulations (CFR) 52.21, New Source Performance Standards (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units 40 CFR 60, Subparts

A and Dc, NSPS for Stationary Compression Ignition and Spark Ignition Internal Combustions 40 CFR Part 60, Subparts A, III (41), and MAC, 2008, AACS, R 336.1201. Specifically, the MDEQ alleges the Hospital installed 4 steam boilers and 3 diesel emergency generators without first obtaining a Permit to Install (PTI) Permit, a Renewable Operating Permit (ROP), complying with the NSPS for boilers/generators, or properly limiting potential to emit of nitrogen oxide emissions to avoid being subject to PSD as cited in the Violation Notice dated May 3, 2012.

Henry Ford West Bloomfield Hospital (P0336); Permit No. 72-12

31. Project Name

LED Replacement of specific Existing Parking Lot and Interior Lamps with LED lighting.

32. Project Manager

Marco Capicchioni
1 Ford Place
Suite 4A
Detroit, MI 48202
(313) 876-9884
FAX: (313) 874-4035
MCAPICC1@hfhs.org

33. DEQ Contact Person

None.

34. Geographical Area to Benefit from the Project

Southeast Michigan Air Basin, with specific work to be performed at:
Henry Ford West Bloomfield Hospital, 6777 West Maple Road, West Bloomfield, MI 48322.

35. SEP Categories

This proposal for replacing parking lot lamps, currently high pressure metal halide and specific indoor metal halide (Atrium grow lights) and general facility lighting, fluorescent T-12 and T-8 bulbs with LED lights meets the following SEP Categories:

- **Pollution Prevention:** this project is designed to substantially reduce and/or prevent the generation of pollutants through the use of more efficient use of electricity. LED lighting has been reported to decrease greenhouse gas emissions. ("McKinsey & Company estimates that LED lighting in commercial applications expected to be available in 2015—along with advanced fluorescents (super T8 systems)—have the potential to reduce greenhouse gas emissions 110 million tons by the year 2030 (McKinsey & Company and Conference Board, 2007).⁸ In addition, the U.S. EPA has determined that energy efficiency projects

⁸ http://cggc.duke.edu/environment/climatesolutions/greeneconomy_Ch1_LEDLighting.pdf)

are appropriate SEPs since they displace the use of fossil fuels to provide energy.⁹

- Pollution Reduction: Energy efficiency projects displace emissions associated with the displaced energy generation, including oxides of nitrogen (NOx), sulfur dioxide (SO₂), mercury (Hg) and other metals, carbon monoxide (CO), as well as carbon dioxide (CO₂).¹⁰
- Public Health: Energy efficiency projects can achieve multi-media and multi-pollutant emission reductions and can enhance a local community economically as well as environmentally.¹¹
- Environmental Awareness

36. Project Description

This SEP consists of (i) the replacement of existing metal halide parking lot lights with LED lamps and associated voltage control units; (ii) replacement of Atrium grow lights with LED lamps ; and (iii) replacement of general facility lighting fluorescent bulbs with LED lamps for specific T-12 and T-8 fluorescents. In accordance with the attached proposals, the LED Retrofit Projects are identified as:

Parking Lot Lighting; Up Lights; Interior Sconces; Atrium Pole Lights; and Atrium Grow Lights.

37. Expected Environmental Benefits

The installation of LED lighting is expected to reduce overall energy usage due to increased energy efficiency. A portion of a report on lifecycle energy comparisons for LEDs versus other light sources is attached.¹²

For ease of review, this SEP proposal discusses environmental benefits following the MDEQ format for a SEP Quality Rating contained in DEQ Policy and Procedures regarding SEPS.

Public Benefit: Increase public awareness of alternative technologies for lighting on a large scale. The increase in awareness may encourage members of the public to be more willing to adopt newer technology (LED) despite the significantly higher upfront cost. Decrease fossil fuels used for electrical generation as a result of increase lighting energy efficiency decreases corresponding air emissions of greenhouse gases and Hazardous Air Pollutants.

⁹ See U.S. EPA Memorandum, "A Toolkit for States: Using Supplemental Environmental Projects (SEPs) to Promote Energy Efficiency (EE) and Renewable Efficiency (RE)", dated January 27, 2005.

¹⁰ Id.

¹¹ Id.

¹² The complete report may be found at:

http://apps1.eere.energy.gov/buildings/publications/pdfs/ssl/2012_LED_Lifecycle_Report.pdf

Innovative: LED's are an emerging technology and while available, have a significantly higher cost of admission than existing alternatives (i.e. CFL, Incandescent, Fluorescent). . There is a significant upfront cost which is orders of magnitude higher than non-LED technology. This higher upfront cost acts as a significant barrier to entry for an organization (or even individuals) to switch to LED lighting. Adoption on a larger scale by HFHS may assist in establishing acceptance of this technology for indoor and outdoor lighting. The New York Times has referenced LEDs in a positive light: "Green Promise Seen in Switch to LED Lighting."¹³

Pollution Prevention: See above. To the extent that less electricity is required for the same lumen output there will be fewer local air emissions from power plants. In addition, the waste disposal footprint is less than with mercury vapor, metal halide or fluorescent tube technology.

Multi-media impact: According to the USEPA: "Management and disposal by businesses of fluorescent light bulbs and other mercury-containing bulbs are regulated under the Resource Conservation and Recovery Act (RCRA) Universal Waste Rule (UWR) and Subtitle C hazardous waste regulations."¹⁴ LED lamp disposal does not fall under these regulations.

Environmental Justice: To the extent that energy efficiency is improved, fewer additional power plants may be required and this SEP may assist with environmental justice concerns associated with power plant siting.

Community Input: The 30 day timeframe for SEP submittal by MDEQ was not sufficient for public outreach.

¹³ http://www.nytimes.com/2009/05/30/science/earth/30degrees.html?pagewanted=print&_r=0

¹⁴ See: <http://www.epa.gov/osw/hazard/wastetypes/universal/lamps/index.htm>

Project Budget

Henry Ford Health System is a domestic nonprofit corporation.

The costs related to the LED replacements are as follows:

- Initial Costs = \$194,573 (Fixtures)
\$62,421 (Labor)
\$1,663.25 (Disposal)
Total = \$258,657.25
- Capital Costs = \$194,573 (Fixture Costs)
- Useful Life = 5.7 years except parking lot and general lighting. Parking lot lights are rated at 11.19 years. HFHS experience has indicated that the useful life often is overrated by vendors and that 50% of vendor's figures is a reasonable realistic estimate.
- One-time, non-depreciable costs = \$62,421 (installation labor)
\$1,663.25 (disposal costs)
Total = \$64,084.25
- Annual Operation Costs = \$1,000 (maintenance)
- Projected Annual Savings for decreased electrical lighting power consumption for entire LED Retrofit Project (see attached breakdown for each type of lighting) = \$60,336

38. Project Schedule

There are five components to the LED replacement project: 1) Parking Lot metal halide lamp replacement (282 lights); 2) HID Up Lights (92 lights); 3) HID Atrium Pole lights (18 lights); 4) HID Sconce Fixtures (49 lights); and HID Atrium Grow Lights (106 lights). The vendor has indicated that 4-6 week lead time is required to obtain components and arrange installation.

The LED lighting would be expected to be installed no later than by March 1, 2013.

39. Accounting

This section is inapplicable since no third party would be involved in the project implementation.

40. Reporting

HFHS will submit a report to the MDEQ within ten (10) days of the completion of each phase of each phase of this SEP. The report will consist of a summary of the tasks completed, vendor receipts as well as photographs of the new lighting.

41. Prior Commitments and/or Regulatory Requirements:

No local, state or federal regulations or binding private commitments would require the implementation of this project or any part thereof.

42. Certification of Expenditures

Attached is a separate certification from HFHS.

We look forward to discussing these matters with you further.

Very truly yours,

FOLEY, BARON & METZGER, PLLC

Richard S. Baron

Richard S. Baron

Direct Dial: (734) 742-1855

Email: rbaron@fbmlaw.com

Brian H. Phinney

Direct Line: (734) 742-1860

Email: bphinney@fbmlaw.com

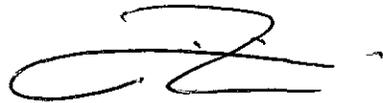
RSB/BHP/ceb

Attachments

cc: Jane Schelberg, Esq. (w/attachments) (via email)
Joe Urbas (w/attachments) (via email)
Marco Capicchioni (w/attachments) (via email)

CERTIFICATION

I, Marco Capicchioni, hereby certify that the proposed SEP for the replacement of existing Parking Lot metal halide lighting and HID Up Lights; HID Atrium Pole Lights; HID Sconce Fixtures; and HID Atrium Grow Lights at the Henry Ford West Bloomfield Hospital is solely attributable to the settlement of the current enforcement action and that no funding has been budgeted to the project prior to the approval of the project, nor is the proposed project funded by grants, donations, low interest loans, or other sources of funding not attributable to the alleged violator's normal budgetary process. The proposed project is not being done, nor will receive credit, as part of an environmental incentive or awards program offered by local, state or federal government, industry, etc.



Marco Capicchioni

Vice President, Facilities Real Estate
and Support Services for the Henry Ford
Health System and project manager for
the Henry Ford West Bloomfield
Hospital