BAY RESTORATION (SEPTIC) FUND PROGRAM IMPLEMENTATION GUIDANCE FOR FY 2014 (updated 7-11-13) FOR ON-SITE SEWAGE DISPOSAL SYSTEM (OSDS) UPGRADES USING BEST AVAILABLE TECHNOLOGY (BAT) FOR NITROGEN REMOVAL

I. Prioritization

The "grant recipients" (local government, health department, others, who are awarded BRF septic funds by the Board of Public Works) should prioritize applications for financial assistance as follows:

- 1. Failing OSDS in the Critical Areas
- 2. Failing OSDS outside the Critical Areas
- 3. Non-Conforming OSDS in the Critical Areas
- 4. Non-conforming OSDS outside the Critical Areas
- 5. Other OSDS in the Critical Areas, including new construction
- 6. Other OSDS outside the Critical Areas, including new construction

II. Income Based Grant Funding

BAT grant assistance should be based on the following Income Criteria:

	% of BAT Cost
Homeowners (may include homes under a housing cooperative)	4000/
1. Household income less than or equal to \$300,000/year	100%
2. Household income more than \$300,000/year	50%
Non-profit Entities	100%
For-profit Businesses	50%

III. Eligible Projects for Bay Restoration (Septic) Fund Grant Funding

Based on the above prioritization, the BRF grant funding may be used for any **one** of the following eligible project options:

- 1. The cost attributable to upgrading an existing OSDS to BAT for nitrogen removal (*most funding requests will fall under this category*).
- 2. The cost differential between a conventional OSDS and one that utilizes BAT for Nitrogen Removal for new construction.
 - * For "cost differential" purposes on new construction, use a statewide average cost of \$1,200 as the cost of a traditional septic tank. The BAT grant must be based on the income criteria percentage applied to the maximum eligibility of "BAT cost minus \$1,200."
- 3. The cost, up to the sum of the cost of each "individual BAT system", of replacing multiple OSDS located in the same community with a new community system that is owned by a local government and meets Enhanced Nutrient Removal Standards (MDE prior approval required).
- 4. The cost, up to the sum of the cost of each "individual OSDS system using BAT", to connect properties to an existing municipal enhanced nutrient removal wastewater facility (MDE prior approval required.) Use the Table below to see if a project meets the statutory requirements.

Connecting OSDS systems to a Wastewater Treatment Plant using BRF Septic Funds

Q1. Are FY 2014, BRF grant funds available to connect OSDS to sewers based on "prioritization" criteria (Item I above)? (For a community of several OSDS, the OSDS must fall within the qualifying priority criteria)

No – STOP. BRF Septic grant funds are not available for sewer connection.

Yes

Q2. Is the proposed sewer connection to an ENR Wastewater Treatment Plant? No – STOP. *BRF Septic Funds cannot be used for the sewer connection.*

Yes

Q3. Is the sewer connection more cost-effective than the cost of repairing or replacing the OSDS with BAT? Example: For an OSDS community with say 50 homes, is the sewer connection cost less than \$1 million? (50 x \$20,000 average cost repairing or replacing an OSDS with BAT). **Yes, go to Q5.**

No – Q4. Is individual replacement of the OSDS not feasible? Example: For an OSDS community with say 50 homes, can Environmental Health Director certify that the individual replacement at 50% or more of the existing OSDS is not feasible or not permitted per county rules due to availability of public sewerage?

No - STOP. BRF Septic Funds cannot be used for the sewer connection.

Yes.

Q5. Is the proposed sewer connection consistent with the County Comprehensive Plan and Water/Sewer Plan?

No – STOP. BRF Septic Funds cannot be used for the sewer connection.

Yes

Q6. Were all of the OSDS proposed for sewer connection in existence as of October 1, 2008? No – STOP. BRF Septic Funds cannot be used for the sewer connection, unless post 10/2008 OSDS are excluded from the sewer connection project.

Yes

Q7. Are the OSDS proposed for sewer connection located in the County Priority Funding Areas? No – STOP. *BRF Septic Funds cannot be used for the sewer connection.*

Yes

Q8. Has the local government adopted a policy or procedure guaranteeing that no household or business constructed after October 1, 2008, will be permitted to connect to portion of the sewerage system "using BRF septic funds."

No – STOP. BRF Septic Funds cannot be used for the sewer connection.

Yes

The sewer connection project can be funded with BRF Septic grant funds. The maximum BRF grant amount is the lesser of the sewer connection project cost or the amount calculated below:

- A. # of OSDS units x \$20,000 (Cost of a complete OSDS with BAT) x 50% (Minimum Income Based % eligibility); or
- B. Cumulative total of each OSDS units x \$20,000 (Cost of a complete OSDS with BAT) x Income based % eligibility for each OSDS owner (based on Income criteria under Section II above)

5. If funds are available after allocating BAT funding to all applicants, the grant funds may also be provided for the repair or replacement of Non-BAT components (e.g., drainfields) for a "low income" household applicant with a "failing" OSDS (this option is not available to businesses or non-profit entities). At least three bids are required for the non-BAT components and one bid can be from the vendor providing the BAT system. The current low-income (DHR energy assistance program) eligibility criteria* is:

Income Eligibility Limits Effective July 1, 2013 – June 30, 2014				
	Maximum Gross Monthly	Maximum Gross Yearly		
Household Size	Income Standards	Income Standards		
1	\$1,675.62	\$20,107.50		
2	\$2,261.87	\$27,142.50		
3	\$2,848,12	\$34,177.50		
4	\$3,434,37	\$41,212.50		
5	\$4,020.62	\$48,247.50		
6	\$4,606.87	\$55,282.50		
For each additional, person add	\$586.25	\$7,035.00		

^{*} See web link for updates: http://www.dhr.state.md.us/blog/?page_id=4334

Grant allowable BAT Cost: Includes the capital cost of BAT plus the cost of 5-years of operations and maintenance (O&M), performed by a certified service provider at a minimum of once per year or the minimum frequency recommended by the manufacturer (This O&M funding is not applicable to BRF grant funded projects under categories "3" and "4" above.)

IV. MDE Approved BAT for Nitrogen Removal

- 1. Ranking of BAT Systems: Consistent with HB 347 (2011 Session), effective June 1, 2011, and every 2-years thereafter, MDE is required to provide on its website an Evaluation and Ranking of all best available nitrogen removal technologies for on-site sewage disposal systems. The evaluation will include for each BAT technology:
 - Total Nitrogen Reduction
 - Total cost including Operation, Maintenance and Electricity
 - Cost per pound of Nitrogen Reduction

As the BRF grant recipient, you <u>MUST</u> provide a copy of this MDE evaluation/ranking (<u>Enclosed: HB347 Ranking Aug-12.pdf</u>) to all BAT grant applicants (i.e., homeowners, businesses that apply for BAT grant funding), so that they can make an informed decision in selecting a BAT system.

For updates, the MDE web link is:

http://www.mde.state.md.us/programs/Water/BayRestorationFund/OnsiteDisposalSystems/Documents/HB347 %20Ranking%20data%20Aug-12.pdf

2. Lowest Cost per Pound of Nitrogen Removal BAT: To simplify the procurement process MDE undertook an Invitation for Bids in 2013, from the field-verified BAT technology vendors/manufacturers: Bio-Microbics, Hoot, Norweco, Orenco, and Septitech. For Bay Restoration Fund BAT procurement purposes, MDE selected the following fixed unit price BAT by Region based on the lowest cost per pound of nitrogen removal:

Vendor (in ranking order based on Cost/Lbs Nitrogen Reduction) REGION: CENTRAL	Cost/Lbs Nitrogen Reduction Comparison Ranking	BAT System	FY 2014 Unit Price/BAT	Contact	Phone
Freemire & Associates, Inc.	1	Bio-Microbic (RetroFast) *	\$10,105	Jeffrey Freemire	410-768-8500
Atlantic Solutions, Ltd. (a)	2	Orenco (Advantex AX20)	\$12,700	Robert Johnson	877-214-9283
Mayer Brothers, Inc.	3	Hoot (BNR)	\$12,419	Nancy Mayer	410-796-1434
Price to Match by other field-verified vendors (cost/lb equivalent)		, ,	Match Price		
Back River Pre-Cast, LLC (b)	4	Norweco (Singular TNT)	\$10,673	Matt Geckle	410-833-3394
Maryland Concrete, Inc.	5	Septitech (M400)	\$13,001	Rodney Glace	443-491-3598

(a). Orenco (Advantex AX20RT), if necessary – Match Price: \$14,748

(b). Norweco (Singular Green), if necessary - Match Price: \$10,797

^{*} RetroFast BAT unit suitable for up to 3-bedroom home and less than 4 occupants.

Vendor (in ranking order based on Cost/Lbs Nitrogen Reduction) REGION: EASTERN	Cost/Lbs Nitrogen Reduction Comparison Ranking	BAT System	FY 2014 Unit Price/BAT	Contact	Phone
Freemire & Associates, Inc.	1	Bio-Microbic (RetroFast) *	\$ 9,605	Jeffrey Freemire	410-768-8500
Atlantic Solutions, Ltd. (c)	2	Orenco (Advantex AX20)	\$13,050	Robert Johnson	877-214-9283
Towers Concrete Products (d)	3	Norweco (Singular TNT)	\$10,618	John Short	443-786- 0594
Price to Match by other field-verified vendors (cost/lb equivalent)		-	Match Price		
Mayer Brothers, Inc.	4	Hoot (BNR)	\$12,355	Nancy Mayer	410-796-1434
Gillespie and Son, Inc.	5	Septitech (M400)	\$12,935	James Gillespie	410-778-0900

(c). Orenco (Advantex AX20RT), if necessary – Match Price: \$14,672

(d). Norweco (Singular Green), if necessary - Match Price: Same as Singular TNT above

* RetroFast BAT unit suitable for up to 3-bedroom home and less than 4 occupants.

Vendor (in ranking order based on Cost/Lbs Nitrogen Reduction) REGION: SOUTHERN	Cost/Lbs Nitrogen Reduction Comparison Ranking	BAT System	FY 2014 Unit Price/BAT	Contact	Phone
Freemire & Associates, Inc.	1	Bio-Microbic (RetroFast) *	\$10,105	Jeffrey Freemire	410-768-8500
Atlantic Solutions, Ltd. (e)	2	Orenco (Advantex AX20)	\$12,800	Robert Johnson	877-214-9283
Superior Tank, Inc. (f)	3	Norweco (Singular TNT)	\$10,700	Jeffrey Earnshaw	301-274-3772
Price to Match by other field-verified vendors (cost/lb equivalent)			Match Price		
Mayer Brothers, Inc.	4	Hoot (BNR)	\$12,451	Nancy Mayer	410-796-1434
Maryland Concrete, Inc.	5	Septitech (M400)	\$13,035	Rodney Glace	443-491-3598

(e). Orenco (Advantex AX20RT), if necessary – Match Price: \$14,785

(f). Norweco (Singular Green), if necessary - Match Price: Same as Singular TNT above

* RetroFast BAT unit suitable for up to 3-bedroom home and less than 4 occupants.

Vendor (in ranking order based on Cost/Lbs Nitrogen Reduction) REGION: WESTERN	Cost/Lbs Nitrogen Reduction Comparison Ranking	BAT System	FY 2014 Unit Price/BAT	Contact	Phone
Freemire & Associates, Inc.	1	Bio-Microbic (RetroFast) *	\$10,105	Jeffrey Freemire	410-768-8500
Atlantic Solutions, Ltd. (g)	2	Orenco (Advantex AX20)	\$13,800	Robert Johnson	877-214-9283
Mayer Brothers, Inc.	3	Hoot (BNR)	\$12,919	Nancy Mayer	410-796-1434
Price to Match by other field-verified vendors (cost/lb equivalent)			Match Price		
Maryland Concrete, Inc.	4	Septitech (M400)	\$13,525	Rodney Glace	443-491-3598
C.R. Semler (h)	5	Norweco (Singular TNT)	\$11,102	Charles Semler	301-416-0414

(g). Orenco (Advantex AX20RT), if necessary – Match Price: \$15,341

(h). Norweco (Singular Green), if necessary - Match Price: Same as Singular TNT above

* RetroFast BAT unit suitable for up to 3-bedroom home and less than 4 occupants.

Unit Price/BAT includes 5-year O&M and MD sales tax (which must be paid, unless BAT unit owner is a sales tax exempt public entity). The price does not include the cost of permits. Future year prices will be adjusted based on 12-month CPI published by the US-DOL, Bureau of Labor Statistics and any MD sales tax changes.

V. Grant Recipient BAT Selection, Procurement and Price

To allow flexibility, the grant recipients (local government, health department etc.) who were awarded the BRF funds by the Board of Public Works) may use the following procurement options for homeowners/businesses to select a BAT technology:

- 1. Homeowner/business chooses one of the higher ranking (Cost/Lb nitrogen reduction) MDE selected/procured BAT system identified by Region in Section IV-(2) above. The maximum grant allowable cost will be the fixed BAT unit price. No further local procurement action is needed.
- 2. Homeowner/business chooses a lower ranking (Cost/Lb nitrogen reduction) BAT, the maximum BRF grant allowable amount is the "Match Price" based on an equivalent cost per pound of nitrogen reduction calculated using the cost per pound conversion factor of the lowest ranking MDE selected fixed price vendor by Region, as the benchmark. This "Match Price" for the low ranking (non-selected) field verified vendors is also shown in Section IV-(2) above. The vendor can either offer the BAT for the Match Price or the homeowner/business can pay for the price difference. Similar Match Prices can be extrapolated for any new field verified vendors that are approved over time (contact MDE for assistance.)
- 3. The grant recipient undertakes a local procurement for the unit cost of the BAT installed, including 5-year O&M based on selection factors such as price, nitrogen reduction efficiency, electrical cost etc. The maximum BRF grant allowable cost will be the fixed unit price provided by the selected BAT vendor for that County.

Note: BRF grant payment should be made directly to the BAT vendor/installer and not to the homeowner/business applicant.