


BAL HARBOUR

- V I L L A G E -

OFFICE OF THE VILLAGE MANAGER

LETTER TO COUNCIL

NO. 011-2016

To: Mayor Martin Packer and Members of the Village Council
From: Jorge M. Gonzalez, Village Manager 
Date: January 15, 2016
Subject: Sewer Capacity Status Impacts to the Village

The purpose of this Letter to Council (LTC) is to provide you with information concerning the recent Miami Dade County designation of Pump Station One (PS-1) to Initial Moratorium, (IM) Status.

PS-1 services the entire Residential Gated Community and the Condominiums on the east side of Collins Avenue from the new Oceania condominium development northward to the Ritz Carlton Hotel. As you are aware, the gravity sewer system is experiencing increased inflow and infiltration resulting in increases in pump operational times at the Village's sanitary pump stations. This type of activity is attributable to age related deterioration of pipes and structures allowing ground water to infiltrate the system. In addition, the Village single family and high rise residential units are continuously being upgraded and frequently reconstructed, adding to the demand on the sewer system.

Every month Bal Harbour Village receives a Certification of Nominal Average Pump Operating Time (NAPOT) report from the Miami Dade County Department of Regulatory and Economic Resources, Division of Environmental Resources Management (DERM), of all the sanitary sewage pump station(s) within their jurisdiction. The latest NAPOT report received from DERM this January, The latest report places an Initial Moratorium, (IM) status on PS-1 within the Village of Bal Harbour.

When a pump station receives this designation from DERM, the following information applies:

- A station is placed manually under IM when the Projected NAPOT is larger than 10.0 hours and the station's previous moratorium was OK.
- The utility, or station owner, shall submit a Remedial Action Plan (RAP) within 30 days to bring the station back in compliance with the federal criteria, including correction of an overflow condition.
- A station may also be placed into this status if there are excessive overflows associated with the station. Certifications will not be issued.

Impact to the Village

Under the (IM) designation nine (9) properties located within the Residential Gated Section which are serviced by PS-1 are affected by the IM status. This means that while building

permits for these properties have been issued as of this date, no certificates of occupancy can be issued by the Building Official until the pump station is deemed to be in compliance. Additionally, no new building permits can be issued for properties serviced by PS-1 which would increase the sewage flow of the current sanitary sewer system until the pump station is deemed compliant and records operating runs times below the maximum of 10 hours per day.

It should be noted that, building permits can still be issued in situations where renovations or new construction at the affected property does not increase the impact to the pump station with increased sewer volume flows.

Four (4) properties serviced by PS-2 are not affected and the certifications can be issued since PS-2 is deemed in compliance at this time.

Utility System Condition

As previously discussed during the Bal Harbour Utility Masterplan development process, the majority of the Village's gravity sanitary sewage collection system was constructed in 1946. The existing sanitary sewage collection system within the Village is "too old, too shallow and too flat." The system was not properly designed or constructed even to 1946 standards, which are similar to the current standards regarding minimum slopes and flowage (velocity) rates. Permitting, regulation and enforcement in 1946 were inconsistent to non-existent thereby providing opportunity for a substandard system to be constructed. Modern day regulation and enforcement are superior to the practices of old. Over the course of the last fifteen (15) to twenty (20) years, numerous repairs and modifications have been performed to maintain the operation of the Village's infrastructure.

Recent evidence that age and corrosion have taken their toll on the system has been revealed in leaks, failing valves and collapsing pavement. Additional data indicates that the gravity sewer system is experiencing increased inflow and infiltration which is the entry of ground water into the system, resulting in increases in pump operational times at the Village's lift stations.

Actions Taken

In recognition of the distressed state of the Bal Harbour Village Utility System and to meet the negotiated terms contained within the Sewer and Sand Agreement, between the Village of Bal Harbour and Consultatio Bal Harbour, LLC, the Bal Harbour Village Council, approved two Resolutions 2015-924 and 2015-925 on February 17, 2015 (See Attached). The resolutions adopted the Sewer and Sand Agreement and approved an agreement with Craig A. Smith and Associates to prepare the necessary engineering analysis, design, permitting and specifications to remove and enhance the existing gravity sewer system along Harbour Way and build a new sanitary pump station located near the yacht basin. This project is Phase One of the planned Utility System restoration. The project is well under way with the construction portion of the project undergoing the bid review process as of this date.

- May 19, 2015 The Bal Harbour Village Council adopted Resolution 2015-949, to approve the Bal Harbour Village Utility Master Plan.
- September 8, 2015, The Bal Harbour Village Council adopted Resolution 2015-970, to approve the Inter-local Agreement between Bal Harbour Village and Miami Dade County for the partial funding of the sanitary sewer system portion of the Utility Master Plan.
- September 8, 2015, The Bal Harbour Village Council adopted Resolutions 2015-972,973,974,975 and 976 to authorize the Village Manager to acquire the necessary utility easements in support of the Phase One Sewer Project.

Regulatory Considerations

While significant progress towards the improvement of the Bal Harbour Village Sewer System is ongoing, unfortunately, the regulatory impact due to the current condition of the Utility System is also increasing. The information below provides a narrative of the regulatory environment in which the Bal Harbour Village Utility System operates under the jurisdiction of Miami Dade County. The material also discusses the impact to our residents and the businesses operating within Bal Harbour Village. The reporting conditions detailed below are mandatory, with various Village Staff from the Parks and Public Spaces, the Building Department and Staff from the Village Engineer, Craig A. Smith and Associates participating in the process to comply.

In conformance with the reporting requirements set forth in Appendix A, Paragraph (F) and (G), of the Consent Decree (CD) between the United States Federal Department of Environmental Protection,(FDEP) and Miami-Dade County; Case No. 1:12-cv-24400-FAM, the Department of Regulatory and Economic Resources, Division of Environmental Resources Management (DERM) must produce every month the ***Adequate Transmission and Treatment Capacity Certifications*** report and the ***Certification of Nominal Average Pump Operating Time (NAPOT)*** report of all the sanitary sewage pump station(s) within their jurisdiction

Adequate Treatment and Transmission Capacity Certifications REPORT:

This report represents DERM's certification to the US-EPA and FDEP of the new sanitary sewer certifications (a.k.a. **Sanitary Sewer Allocations**) for projects approved during the reporting month, and all previous months. All new building permits or certificates of use/occupation licenses that resulted in an increase of sewage flows must have a written approval from DERM (a.k.a. Sanitary Sewer Allocation).

Pursuant to said CD, The Village of Bal Harbour reports to DERM the status of each Building Permit Application that was issued a Sanitary Sewer Allocation. When this information is received by DERM, the agency will be able to remove those Allocations (flows), which have been already certified and/or are no longer valid, from the sanitary sewer Pump Station (PS) basins. Therefore, there will be more flows available for future development projects within Bal Harbour Village.

- DERM prepares a new report every month that includes all the New, as well as the previously issued, Allocations for which the Certification of Occupancy (CO/CC/CU) has not been reported to DERM.

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- If the above information is not submitted, DERM will not be able to remove those Allocations that have been certified and/or are no longer valid, therefore, the available capacity at the PS servicing the basins will be limited and potentially no longer available for future developments.

Certification of Nominal Average Pump Operating Time (NAPOT):

This certification is based on the elapsed time data submitted by Bal Harbour Village up to the date the report is prepared by DERM.

The Report provides specific moratorium status as well as the available capacity for each of the two (2) pump stations within the Village. Knowing the moratorium status and the available capacity assists the Admiration to identify those areas for future development or expansion within Bal Harbour Village that may or may not be impacted by the status of the sanitary sewer pump stations.

1. Pursuant to the provisions set forth in the above mentioned Consent Decree, DERM will not authorize the issuance of any building permit(s) within Bal Harbour Village where adequate transmission capacity does not exist, until Bal Harbour Village submits to DERM a Corrective Action Plan (CAP) and a schedule of the work to be done, that sets forth a program that will ensure adequate transmission capacity.
2. Within 30 days, we are required to submit to DERM for approval a CAP for each PS with a moratorium status "IM" (Initial Moratorium).
3. Failure to submit the CAP may prevent DERM from allowing sewer increases, which could be approved under the new Fill-In criteria.
4. Special consideration is to be taken with those pump stations which show an actual or projected NAPOT close to the ten (10) hours criteria as incoming projects could easily exceed or limit future development within the service area of the pump station(s).

In accordance with the provisions of Appendix A, no new sanitary sewer certifications will be approved, or no new building permits may be issued within those collection systems, or portions thereof, for which sufficient information is not available to make a determination of adequate transmission capacity, as defined in the above mentioned Appendix A of said Consent Decree.

The monthly NAPOT report, provides the status of the two (2) pump stations in Bal Harbour Village with regard to their compliance status in terms of operating times with the two applicable codes listed in the information described below:

OK Moratorium,(OK) Status

- The Pump Station under compliance with Chapter 24 and EPA Regulations with Projected NAPOT pump runs times less than 10.0 hours per 24 hour period.
- Certification may be issued without conditions

- The High Annual Monthly Average (HAMA) for the station is equal to or less than 15.0 operating hours per 24 hour period.

Initial Moratorium, (IM) Status

- A station is placed manually under IM when the Projected NAPOT is larger than 10.0 hours and the station's previous moratorium was OK.
- The utility, or station owner, shall submit a Remedial Action Plan (RAP) within 30 days to bring the station back in compliance with the federal criteria, including correction of an overflow condition.
- A station may also be placed into this status if there are excessive overflows associated with the station. Certifications will not be issued.

A completed table of the various pump station status codes utilized by DERM is attached for your reference (See Attached)

Under the approved agreement with Craig A. Smith and Associates, the design of the new pump station to replace the non-compliant station, PS-1, is in the construction bidding phase with the agreement for the selected contractor expected to be presented to the Bal Harbour Village Council at the February 16, 2016 meeting for approval.

Craig A. Smith and Associates is in the process of compiling the necessary data to prepare the required Corrective Action Plan (CAP) in order for the Village to comply with the Miami-Dade County (MDC) Department of Environmental Resource Management (DERM) and the Environmental Protection (EPA) regulatory requirements and their reporting deadlines.

The reporting requirements include:

- A comprehensive GIS Sewer Atlas which was due and submitted January 6, 2016
- An annual CMOM report which is currently being prepared and due January 31, 2016
- A CMOM Plan of Compliance (POC) which is currently being prepared and due March 11, 2016
- A Sanitary Sewer Evaluation Survey (SSES) which is currently being prepared and due November 12, 2016

The IM designation as reflected in the narrative above has the potential to affect the ability of our residents to expand their existing homes and to build new larger homes. Due to this recent designation, the nine (9) properties face obstructions in their ability to obtain certificates of occupancy in order to close out their existing building permits. Additionally, we have been made aware of one property which has recently received a denial for a new building permit due to this recent IM designation,

Lastly, in order to begin construction of the new sewer line and pump station, the completion of the necessary utility easements acquisition is critical to proceed with this work. to rectify this situation.

If you have any questions or need any additional information, please contact me.

NEW PS MORATORIUM STATUS CODES

HAMA	= High Annual Monthly Average
RAP	= Remedial Action Plan
C/O	= Certificate of Occupancy
"H"	A status ending in H indicates that the HAMA is greater than 15.0 hrs.

The letter "C" at the beginning of the Code means a "CONDITIONAL" Status

AC / FN	<p>Approved Corrected / Finished No-Allocations: Once the utility certifies that RAP is complete, the PS status will be manually changed to AC, if the most recently reported monthly average run time (MART) is less than or equal to 10.0 hrs, OR</p> <p>changed to FN if the most recent reading was greater than 10.0 hrs, OR if there has not been a recent MART submitted for the station, <u>provided</u> that the HAMA for the station is less than 15.0 hrs.</p> <p>The station status date is set to the current date, at the time when the moratorium is changed from Conditional status to a Certified completed status.</p> <p>The station is checked monthly for 12 months after the ETs are provided and the station moratorium status reset accordingly.</p> <p>Staff will check the Projected NAPOT after 12 months of the certification of the RAP to determine if the RAP was successful or not. If the projected NAPOT is less than or equal to 10.0 hrs, the station is manually moved</p> <p>Unconditional allocations may be issued without restriction when the station is under AC status.</p> <p><i>No allocations may be issued when the station under FN status.</i></p>
AH / FH	<p>Approved HAMA / Finished HAMA: After the utility certifies the RAP to be complete, for PSs where the HAMA for the station is greater than 15.0 hrs, the PS status will be manually changed to AH if the most recently reported MART is less than or equal to 10.0 hours, OR</p> <p>to FH if the most recent MART was greater than 10.0 hrs, or if there has not been a recent reading provided for the station.</p> <p>The station status date is set to the current date, at the time when the moratorium is changed from Conditional status to a Certified completed status.</p> <p>The station is checked monthly after the ETs are provided and the PS moratorium status reset accordingly.</p> <p>Unconditional allocations may be issued without restriction when the station under AH status, except for those allocations subject to HAMA restrictions</p> <p><i>No allocations may be issued when the station under FH status.</i></p> <p>Staff will check the Projected NAPOT after 12 months of the certification of the RAP to determine if the RAP was successful or not. If the projected NAPOT is less than or equal to 10.0 hrs, the station is manually moved to OK or OH status, otherwise the station is put into AM.</p>

AM	<p>Absolute Moratorium: The station has shown to have inadequate capacity (Projected NAPOT above 10.0 hrs) after 12 months from the certification of the RAP.</p> <p>No allocations are allowed until station has been shown to have adequate capacity</p> <p>These moratorium status are changed (set/removed) manually.</p>
CH	<p>Conditional HAMA: The station is manually moved to CH status when a station is under IM and the RAP is provided and approved, and the HAMA for the station is more than 15.0 hrs.</p> <p>There is no limit to the amount of conditional allocations that may be issued for construction while under CH.</p> <p>No certificate of occupancy may be issued for the work permitted under CH until the RAP is certified complete by the utility.</p> <p>Once the RAP work is certified, all conditional allocations issued while the station under CH status, except those limited by HAMA restrictions, are cleared to receive a C/O.</p> <p>If the Projected NAPOT for the PS is less than 12.0 hours, some unconditional allocations may be issued within the limits described for Fill-in allocations.</p> <p>The PS will stay in this status until changed manually</p>
CM	<p>Conditional Moratorium: The PS will be manually placed under CM status when a station is under IM and the RAP is provided and approved and a RAP has been submitted, and the HAMA for the PS is equal to or less than 15.0 hrs.</p> <p>New allocations will be granted with the condition that the corresponding municipality shall not issue certificates of occupancy or completion until the proposed plan of corrective action is completed and implemented as planned.</p> <p>Once the work is certified, all conditional allocations issued while the station under CM status are cleared to receive a certificate of occupancy upon completion and certification of the facility</p> <p>If the Projected NAPOT for the station is less than 12.00 hours, some unconditional allocations may be issued within the limits described for Fill-in allocations.</p> <p>If the HAMA for the PS goes over 15.0 hrs, the computer will change the moratorium status to CH. Other than that, the station will stay under CM status until changed manually.</p> <p>There is no limit to the amount of conditional allocations that may be issued while the PS is under CM.</p>

<p>CN</p>	<p>Conditional New: This status indicates that the PS is new and/or under construction.</p> <p>The PS record is created in the database to allow for Conditional allocations to be issued within the proposed PS basin.</p> <p>No C/Os may be issued/released for the projects permitted until the PS is certified complete by the utility.</p> <p>After the new PS construction is certified complete, all Conditional allocations issued under CN status are cleared to receive the C/O.</p> <p>The PS moratorium status is changed manually from CN to OK after the new PS construction is certified complete.</p> <p>No unconditional allocations are issued for stations under CN status.</p>
<p>IM</p>	<p>Initial Moratorium: A station is placed manually under IM when the Projected NAPOT is larger than 10.0 hrs and the station's previous moratorium was OK.</p> <p>The utility, or station owner, shall submit a RAP within 30 days to bring the station back in compliance with the federal criteria, including correction of an overflow condition.</p> <p>A station may also be placed into this status if there are excessive overflows associated with the station.</p> <p>Certifications will not be issued.</p>
<p>IN</p>	<p>Incomplete: PSs may be placed into IN status by the computer if there are no ET readings provided for one year, or may also be placed manually as conditions indicate.</p> <p>Stations are placed into IN status due to a lack of information necessary to determine if the station has adequate capacity. This might be a failure to provide ET readings, explain an overflow, or other causes.</p> <p>When the information is provided, the station is removed from IN status.</p> <p>Stations are only removed from IN status manually.</p> <p>No new allocations will be issued until the owner/operator corrects this condition.</p>
<p>OK</p>	<p>OK Moratorium: The PS under compliance with Chapter 24 and EPA Regulations (Projected NAPOT less than 10.0 hrs).</p> <p>PSs are switched from AC to OK if twelve (12) months after the proposed RAP was completed the PS's Projected NAPOT is less than 10.0 hrs.</p> <p>Certification may be issued without conditions.</p> <p>The HAMA for the station is equal to or less than 15.0 hrs.</p>

OH

OK HAMA: The Projected NAPOT for the station is less than 10.0 hrs and the HAMA for the station is greater than 15.00 hours

Unconditional allocations are allowed up to 10.0 hr for the Projected NAPOT, except for allocations subject to HAMA restrictions.

Notes:

- 1) The computer system will track what is the highest monthly average run time (MART) for each station during the previous calendar year.
- 2) The cutoff point to differentiate between the status classes is whether or not the highest reading in this register is above 15.0 hrs
- 3) A station may alternate status as the values of the past year change.
- 4) The computer will automatically set the OH status when the HAMA goes over 15.00 hours.
- 5) Staff will check the set dates on the OH stations each month to see if a year has past since the status was set. If it has, staff will check to see if there have been any readings over 15.0 hrs since then.
 - 5a) If so, staff will set the moratorium status date to the date of the latest reading over 15.0 hrs.
 - 5b) If not, staff will check if a Peak Flow Capacity Study (PFCS) for the HAMA has been requested.
 - 5c) If a PFCS requested, staff will change the moratorium status date to the current date.
 - 5d) If no readings over 15 hrs and no PFCS requested in last 12 months then, staff will set the status date to the current date and change the status to OK.

RM

Restricted Moratorium: PS under RM status are restricted for new allocations only for a specific area(s) of the PS basin. Generally this is due to multiple overflows in a particular section of the collection system.

Within the restricted area of the basin, the RM status is the same as IM status until a RAP is provided, then the status is the same as CM/CH status, depending on the HAMA reading.

The rest of the PS basin is considered to under moratorium status OK/OH status, depending on the HAMA reading.

These moratorium status is changed (set/removed) manually.

All PSs under RM will be checked each month to determine if the Projected NAPOT goes over 10.0 hrs.

If the PS Projected NAPOT goes over 10.0 hrs while the station is under RM status, the status will be manually changed to IM.

<p>TH</p>	<p>Temporary HAMA: This moratorium status is set by the computer when the Projected NAPOT for the pump station exceeds 10.0 hrs, and</p> <p>The HAMA for the station is equal or greater than 15.0 hrs.</p> <p>If the Projected NAPOT for the station goes below 10.0 hrs, the computer will change the status back to OH.</p> <p>If by the end of the month, when the NAPOT report is created and the PS status is still under TH, the moratorium status will be manually changed to IM, and the status date changed to the current date.</p> <p>No allocations may be issued while the station under TH status.</p>
<p>TM</p>	<p>Temporary Moratorium. The computer database recalculates the Projected NAPOT on a daily basis and places PSs under TM if the Projected NAPOT is over the 10.0 hours.</p> <p>If by the end of the month the station's Projected NAPOT is still over the 10.0 hrs, the moratorium status is manually changed to IM or IN or AM, whichever applies.</p> <p>If the projected NAPOT for the station goes below 10.0 hrs, the computer will change the status back to OK.</p> <p>No Certification letters are issued while the station is under TM status.</p> <p>The HAMA for the station is equal to or less than 15.0 hrs.</p>