

## Rules for the SFPUC's Non-Potable Water Ordinance Excess Use Charge Program

In January 2017, the San Francisco Public Utilities Commission (Commission or SFPUC), by Resolution No. 17-0019, approved the Non-potable Water Ordinance Excess Use Charge Program (Program). The Program was established for each development project (referenced herein as project) required to comply with Article 12C of the San Francisco Health Code (also known as the Non-potable Water Ordinance (NPO)). The purpose of the Program is to ensure that development projects required to comply with Article 12C are treating and reusing alternate water sources onsite for the life of the building. The objectives of the Program include:

1. Reducing the use of SFPUC potable water supplies for non-potable purposes by using treated alternate water sources;
2. Enforcing the provisions of Article 12C, which as of January 1, 2022, will require that new buildings of 100,000 square feet or more of gross floor area be constructed, operated, and maintained using specified alternate water sources for required non-potable uses; and
3. Discouraging water use practices that are wasteful and/or unnecessary for health and safety.

The SFPUC implements the Program through the Rules adopted by the Commission. Upon approval by the Commission, these rules will replace the rules adopted by Resolution No. 17-0019 in their entirety.

### A. Article 12C Water Budget Requirements

Article 12C requires project applicants to use the Water Budget Calculator and to submit Water Budget Documentation to assess the amount of required Alternate Water Sources (e.g. graywater, blackwater, foundation drainage, or condensate) produced onsite (**NPO Supply**), the required non-potable uses (e.g. toilet and urinal flushing, clothes washing, irrigation, and drain trap priming) (**NPO Demand**), and the project's total water demand. Article 12C specifies which Alternate Water Sources and non-potable uses are required, based on the size and type of the project. Table 1, below, presents a summary of those requirements.

The SFPUC General Manager or any individual designated by the General Manager to act on his or her behalf (herein referred to as General Manager) will use the information submitted in the Water Budget Calculator and the Water Budget Documentation to establish the project's Water Budget. The approved **Water Budget** will specify the **NPO Compliance Volume** (i.e. the volume of non-potable water that must be treated and reused per the requirements of Article 12C as defined in equation 1 below), the **NPO Make-Up Water Volume** (i.e. the volume of potable water required to meet any shortfall

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in NPO Supply as defined in equation 2 below), and the **Potable Make-Up Allocation** (i.e. the NPO Make-Up Water Volume plus 10% of the NPO Compliance Volume as defined in equation 3 below). The General Manager will assign projects monthly and cumulative 6-month Potable Make-Up Allocations. The cumulative 6-month Potable Make-Up Allocation allows projects more flexibility in how they meet their Potable Make-up Allocation.

Table 1. Requirements for NPO Supply and NPO Demand for Large Development Projects under Article 12C of the San Francisco Health Code.

Application for Site Permit Submitted:	Pre-Jan.1 2022		Post-Jan.1 2022	
	Required Alternate Water Sources (NPO Supply)	Required Non-potable Uses (NPO Demand)	Required Alternate Water Sources (NPO Supply) <sup>1</sup>	Required Non-potable Uses (NPO Demand)
Commercial	<ul style="list-style-type: none"> <li>• Graywater</li> <li>• Rainwater</li> <li>• Foundation drainage</li> </ul>	<ul style="list-style-type: none"> <li>• Toilet &amp; urinal flushing</li> <li>• Irrigation</li> </ul>	<ul style="list-style-type: none"> <li>• Blackwater</li> <li>• Condensate</li> </ul>	<ul style="list-style-type: none"> <li>• Toilet &amp; urinal flushing</li> <li>• Drain trap priming</li> </ul>
Multi-family Residential and Mixed-Use	<ul style="list-style-type: none"> <li>• Graywater</li> <li>• Rainwater</li> <li>• Foundation drainage</li> </ul>	<ul style="list-style-type: none"> <li>• Toilet &amp; urinal flushing</li> <li>• Irrigation</li> </ul>	<ul style="list-style-type: none"> <li>• Graywater</li> <li>• Condensate</li> </ul>	<ul style="list-style-type: none"> <li>• Toilet &amp; urinal flushing</li> <li>• Irrigation</li> <li>• Clothes washing</li> <li>• Drain trap priming</li> </ul>

(Eq. 1) (a) If  $NPO\ Supply > NPO\ Demand$ ,  $NPO\ Compliance\ Volume = NPO\ Demand$

(b) If  $NPO\ Supply < NPO\ Demand$ ,  $NPO\ Compliance\ Volume = NPO\ Supply$

(Eq. 2)  $NPO\ Make-Up\ Water\ Volume = NPO\ Demand - NPO\ Supply$  (greater than or equal to 0)

(Eq. 3)  $Potable\ Make-Up\ Allocation = NPO\ Make-Up\ Water\ Volume + 0.1 * NPO\ Compliance\ Volume$

<sup>1</sup> Projects may choose to capture rainwater or stormwater voluntarily; however, they are not required alternate water sources.

## B. Article 12C Water Usage Reporting

1. **Usage Data To Be Reported:** Projects are required to submit data on a monthly basis to the General Manager. Projects must submit the total monthly flow volume from both (1) the flow meter on the treated Alternate Water Source distribution system (which measures the volume of treated non-potable water used for non-potable demands in the building), and (2) the flow meter on the potable make-up water pipeline to the Alternate Water Source System (which measures the volume of potable water used to meet any shortfall in NPO Supply).<sup>2</sup> The flow meters must be regularly calibrated to ensure accuracy in the data being reported.

If a flow totalizer is being used by the project on either flow meter, the project shall submit the following information: (1) the meter reading at the beginning of the first day of the calendar month, (2) the meter reading at the end of the last day of the calendar month, and (3) the total volume recorded, i.e. reading (2) minus reading (1).

2. **Data Submission Deadline:** Data must be submitted by the 15th of each month for the previous calendar month.
3. **SFPUC Response to Reported Data:**
  - a) Monthly submission of data will allow the project and the SFPUC to track whether the project is on track to meet its Potable Make-Up Allocation. Every month, the General Manager will compare the project's reported data from the flow meter on the potable make-up water pipeline to the Alternate Water Source System against the project's Potable Make-Up Allocation. Any volume of water used that exceeds the Potable Make-Up Allocation is considered the excess use volume. After reviewing the data, the General Manager will promptly provide email notification to the project's treatment system manager and the SFPUC billing account holder regarding whether or not the project is on track and is likely to receive an excess use charge at the end of the 6-month compliance period.
  - b) At the end of each 6-month compliance period (i.e. in early January and early July), the General Manager will conduct a true-up of the monthly data to determine whether the project met the cumulative 6-month Potable Make-Up Allocation. If the project exceeds its Potable Make-Up Allocation, excess use charges will be applied to the excess use volume.
  - c) If a project does not report the data as described above, the General Manager will assume that during the period for which there is no data, the project did not treat or reuse any non-potable water. As a result, excess use charge may be applied to the volume of water that exceeds the Potable Make-Up Allocation.
  - d) The General Manager will review reported data from the flow meter on the treated Alternate Water Source distribution system for tracking purposes relative to the project's NPO Compliance Volume; however, the data will not be used to calculate excess use charges.

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<sup>2</sup> Both flow meters are required for all projects per the San Francisco Department of Public Health Director's Rules and Regulations Regarding the Operation of Alternate Water Source Systems.

## C. Article 12C Excess Use Charge Program Enforcement

1. **Enforcement Mechanism:** As authorized by Article 12C at Section 12C.4(e), each project that exceeds its Potable Make-Up Allocation will be subject to excess use charges – additional fees for the volume of potable water used to meet any shortfall in supply.
2. **Excess Use Charge Rate:** For each project that exceeds its Potable Make-Up Allocation, the project will be subject to excess use charges that will be calculated and applied as follows:
  - a) Article 12C at Section 12C.4(e) authorizes excess use charges on each unit of potable water exceeding the Allocation at 300% (3x) the applicable water and wastewater rates.
  - b) Each unit of water above the project’s Potable Make-Up Allocation for the 6-month compliance period will be billed at a rate equal to 200% (“2x”) of the average water and sewer rates applicable to the project at the time of use. Because the project has already paid once for the potable water and associated sewer service in their standard monthly bill, the excess use charge that will be applied at the end of the six-month compliance period is equal to 2x the water and sewer rate for the excess water used. Collectively, the total excess use charges amount to 300% (3x) the applicable water and wastewater rates.
3. **Excess Use Charge Calculation:** Using the project’s monthly bill for water and sewer fees, excess use charges will be calculated as follows:

$$\text{Excess Use Volume} = \text{Total 6-month metered NPO Make-Up Water Volume} - \text{Total 6-month Potable Make-Up Allocation}$$

Projects will be assigned monthly and cumulative 6-month Potable Make-Up Allocations. If the total 6-month metered potable makeup water is less than or equal to the total 6-month Potable Make-Up Allocation, the excess use volume is equal to 0.

Additionally, if a project does not report the data as described in Section B, SFPUC will assume that during the period for which there is no data, the project did not treat or reuse any non-potable water. The project’s excess use volume would be equal to the Total 6-month Potable Make-Up Allocation.

Based on the project’s billing data, the components of the excess use charge are calculated as follows:

- **Water Component Rate:** average water rate charged over the six-month compliance period

$$\text{Water Component Rate} = \frac{\text{Water bill segment amount}}{\text{Metered water use}}$$

- Wastewater Component Rate: average rate charged for all sewer fees—base, suspended solids (SSD), chemical oxygen demand (COD), oil & grease (GOD)—over the six-month compliance period

$$\text{Wastewater Component Rate} = \frac{\text{Wastewater base charge} + \text{SSD} + \text{COD} + \text{GOD}}{\text{Metered water use}}$$

The total excess use charge is calculated as follows:

$$\text{Excess Use Charge} = 2 * \text{Excess Use Volume} * [\text{Water Component Rate} + \text{Wastewater Component Rate}]$$

4. **Excess Use Charge Program Start Date:** Excess use charges will not be incurred or assessed until the NPO Excess Use Charge Program Start Date. In order to determine the start date, the General Manager will use the following approach: the General Manager will determine when the project has reached 25% building occupancy, a threshold at which most onsite reuse systems should have sufficient flow to begin operating. A project will be classified as having 25% occupancy when the billed monthly water usage is greater than 25% of the project's total water demand as specified in the Water Budget Documentation and Water Budget Calculator for three consecutive months. The NPO Excess Use Charge Program Start Date will commence 1 year after reaching 25% occupancy. Projects will be notified of their NPO Excess Use Charge Program Start Date when they have reached the 25% building occupancy threshold. The General Manager will also provide projects with instructions for submission of required data, as described above.
5. **Enforcement Timing:** The Potable Make-Up Allocations will be enforced on a 6-month cumulative basis, from January to June, and July to December. These 6-month periods, which are the same for all projects regardless of the project's start date, are referred to as 6-month compliance periods. If a project begins eligibility for excess use charges in the middle of a 6-month compliance period, the Potable Make-Up Allocation will be enforced beginning the starting month until the end of that period. For example, if a project becomes subject to the allocation requirement in April, the initial compliance period will be between April and June.
6. **Enforcement Billing:** Projects will be billed for excess use charges on a bi-annual basis. Excess use charges will appear on the project's water bill two months after the end of the 6-month compliance period (i.e., excess use charges for the January – June compliance period will be included on the August bill; excess use charges for the July – December compliance period will be included on the February bill).

## **D. Temporary Suspension of Onsite Water Systems Operations Request**

A project may request a temporary suspension of an onsite water system's operations if a natural disaster or any other circumstance beyond the reasonable control of the party from whom performance is required causes the onsite water reuse system to be inoperable for a period of time that is more than 30 days and therefore the project cannot reuse water onsite.

A project can request a temporary suspension by completing and submitting an NPO Temporary Suspension Request form.

- A project must certify that except as may be specified in the temporary suspension request, the onsite reuse system has been operating according to the Operations & Maintenance Manual and to the best of its ability has been in compliance with the NPO.
- A project must specify the amount of time needed to re-start the onsite water system's operation.
- A project must provide evidence to support their request for a temporary suspension.

If the project does not follow the process for a temporary suspension, the project is not meeting its obligation to continuously operate the onsite water system and therefore excess use charges may be incurred.

The General Manager will review the temporary suspension request and will communicate to the project whether additional info is needed or if the request is approved.

If the project needs to suspend operation of the onsite water reuse system for a period of time longer than approved in response to the original request, the project must submit another Non-potable Water Ordinance Temporary Suspension Request form for review and approval by the General Manager.

## **E. Revised Potable Make-Up Allocation Request**

A project that is continuously operating the onsite water system in compliance with the NPO may request a revised Potable Make-Up Allocation if the project's current Potable Make-Up Allocation is not representative of the project's metered NPO Supply and/or actual NPO Demand. This includes situations where circumstances affecting the project's water use practices, such as occupancy or zoning, have changed and significantly altered the project's water usage since establishing the project's approved Water Budget, warranting a modification to the project's Potable Make-Up Allocation.

A project can request a revised Potable Make-Up Allocation by completing and submitting an NPO Allocation Revision Form.

Projects can request two types of revisions to the Potable Make-Up Allocation. The type of revision that is appropriate for a given project depends on how much data the project can provide to support the request for a revision.

- **Temporary revision:** if a project has less than 6 months of continuous data to support a request for a revision<sup>3</sup>, the project can request a temporary revision, which would apply retroactively for a portion of the relevant six-month compliance period. For example, if a project experiences a change in water use habits in April, they could submit a temporary revision request at the end of June, along with supporting data, and could receive a modified revision for the period of April – June. This revision would NOT apply permanently going forward. To receive a long-term revision, the project would need to go through the process for a long-term revision once they have at least six months of data to support the request.
- **Long-term revision:** long-term revisions to the Potable Make-Up Allocation will only be made based on at least six months of continuous<sup>4</sup> data to support the request. The data must demonstrate that the project’s current Potable Make-Up Allocation is not representative of the actual NPO Supply and/or NPO Demand.

Projects must complete the NPO Allocation Revision Form and provide evidence to support their request for a revised allocation.

- a. A project must certify that the onsite reuse system has been operating according to the Operations & Maintenance Manual and to the best of its ability has been in compliance with the NPO.
- b. A project must submit data demonstrating that the metered NPO Supply and/or NPO Demand are different from the approved Water Budget. For a long-term revision, data must be from at least a 6-month period. If fewer than 6 months of data are available, the project is only eligible for a temporary revision to the allocation.
- c. Revised allocations may be based on one of the following justifications:
  - i. Insufficient NPO Supply
  - ii. Larger than anticipated NPO Demand

The General Manager will review the evidence submitted and make a determination about whether a revised allocation is warranted.

The General Manager also reserves the right to revise a project’s Potable Make-Up Allocation if it is determined that the Allocation no longer reflects the project’s actual water usage. The General Manager will communicate immediately to the project any action taken to revise the project’s Potable Make-Up Allocation.

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<sup>3</sup> SFPUC recognizes that water use and the generation of alternate water sources within a building and district can vary from month to month. SFPUC requires at least six months of data to support a request for a permanent revision so that SFPUC can confirm that the revised allocation is representative of average NPO Demand and NPO Supply.

<sup>4</sup> Certain discontinuous data will be considered on a case by case basis; for example, if a project has three months of data followed by one month of downtime for unplanned maintenance and three subsequent months of data.

## **F. Excess Use Charge Appeal Process**

If a project subject to the NPO Excess Use Charge Program can demonstrate that they have been incorrectly charged excess use charges, the project can appeal the charges. For example, if a project submits their data late and therefore receives excess use charges, the project can appeal the excess use charges if an explanation and supporting documentation are provided.

Projects must submit an appeal within 30 days of receiving an excess use charge using the Excess Use Charge Appeal Form.

The General Manager will review the evidence submitted and make a determination about whether the appeal can be granted. If an appeal is granted and the project has already paid the excess use charges that are at issue in the appeal, the General Manager will issue a refund.