

**Memorandum**

**Date:** February 14, 2023

**From:** Mandy Patek, Financial Assurance Auditor

**To:** Owners and/or Operators of Solid Waste Permitted Facilities

**Subject:** Adjusting Cost Estimates and Financial Assurance Annually  
*(Applies to Solid Waste Permits with a Renewal Date of 07/01/2023 – 06/30/2024)*

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K.A.R. 28-29-2101(f) states the owner or operator shall update the financial assurance amount by recalculating the cost of closure, post closure care, or both, using current dollars or by the addition of an inflation factor to the amount accepted by the department for the prior year.

If using current dollars to recalculate the cost estimate(s) and financial assurance, third-party costs shall not be discounted, nor shall any offset for the sale of recoverable materials be subtracted. Third-party costs shall be determined from one or more of the following sources:

1. Actual invoices paid by the owner or operator for the same or similar work;
2. written bids from professional contractors having no other financial interest in the facility or its use;
3. authoritative costing tables issued by publishers recognized for their research into the costs of the activities to be priced.

If the inflation factor is used, the cost estimate(s) and financial assurance shall be adjusted according to the following formula:

$$(IPD_y/IPD_{y-1}) \times FA_{y-1} = FA$$

Where:

IPD<sub>y</sub> represents the current annual implicit price deflator for the gross domestic product;  
IPD<sub>y-1</sub> represents the previous year's implicit price deflator for the gross domestic product;  
FA<sub>y-1</sub> represents the previous year's approved estimate of closure or post closure, or both; and  
FA represents the current estimated cost of closure or post closure, or both.

The Implicit Price Deflator (IPD) for Gross Domestic Product (GPD) is a measure of the change in prices of all new, domestically produced, final goods and services. The U.S. Department of Commerce, Bureau of Economic Analysis publishes these factors on a quarterly and annual

basis. The factors are available in Table 1.1.9 Implicit Price Deflators for Gross Domestic Product (Table 1.1.9 Attached).

The current annual deflator for 2022 is 127.192.

The current annual deflator for 2021 is 118.895.

$$(127.192/118.895) \times FA_{y-1} = FA$$

$$**1.070 \times FA_{y-1} = FA**$$

**2021 Inflation Factor**

**1.070 or 7.0%**

## Bureau of Economic Analysis

**Table 1.1.9. Implicit Price Deflators for Gross Domestic Product**

[Index numbers, 2012=100]

Last Revised on: January 27, 2022 - Next Release Date February 24, 2022

| Line |   | 2020           | 2021           |
|------|---|----------------|----------------|
| Line |   |                |                |
| 1    | <b>Gross domestic product</b>                                   | <b>113.648</b> | <b>118.357</b> |
| 2    | <b>Personal consumption expenditures</b>                        | <b>111.225</b> | <b>115.547</b> |
| 3    | Goods   | 94.160         | 98.906         |
| 4    | Durable goods   | 85.784         | 91.037         |
| 5    | Nondurable goods  | 98.602         | 102.923        |
| 6    | Services  | 120.302        | 124.238        |
| 7    | <b>Gross private domestic investment</b>                        | <b>109.698</b> | <b>113.117</b> |
| 8    | Fixed investment  | 111.052        | 115.321        |
| 9    | Nonresidential  | 104.813        | 106.433        |
| 10   | Structures  | 120.852        | 127.524        |
| 11   | Equipment   | 97.388         | 97.700         |
| 12   | Intellectual property products                                  | 104.574        | 105.588        |
| 13   | Residential   | 138.541        | 153.233        |
| 14   | Change in private inventories                                   | ---            | ---            |
| 15   | <b>Net exports of goods and services</b>                        | <b>---</b>     | <b>---</b>     |
| 16   | Exports   | 96.188         | 107.372        |
| 17   | Goods   | 88.162         | 100.662        |
| 18   | Services  | 114.517        | 121.371        |
| 19   | Imports   | 88.075         | 94.570         |
| 20   | Goods   | 83.963         | 90.493         |
| 21   | Services  | 109.820        | 115.555        |
| 22   | <b>Government consumption expenditures and gross investment</b> | <b>114.861</b> | <b>120.021</b> |
| 23   | Federal   | 112.018        | 115.999        |
| 24   | National defense  | 110.039        | 114.062        |
| 25   | Nondefense  | 115.108        | 119.032        |
| 26   | State and local   | 116.725        | 122.678        |
|      | Addendum:   |                |                |
| 27   | Gross national product  | 113.636        | ---            |