

**To prevent algal blooms, the Ministry of Environment will better manage
accumulated compost in the Nakdong River systems**

*Tuesday, May 16, 2023, 10:30, Park Pan-gyu, Director of the Water Quality &
Aquatic Ecosystem Division (Ministry of Environment)*

Hello everyone, my name is Park Pan-gyu, and I am a director of the Water Quality & Aquatic Ecosystem Division in the Ministry of Environment.

Today, I will discuss ways to prevent algal blooms in the Nakdong River systems. Our approach will involve enhancing compost management practices.

This summer, the Ministry of Environment will better manage compost in streams, banks, and roads to prevent algal blooms in the Nakdong River.

The Ministry discovered the Nakdong River systems had over 1,500 illegal compost piles last year. Unfortunately, around 40% of the compost has not been appropriately managed.

As we can see, compost accumulated near the streams will wash away when it rains. But the problem is that the nitrogen in the compost exceeds our water quality management target by 600 times with more pollutants, while phosphorus surpasses it by 700 times.

When it rains, the compost is at risk of being washed away into the streams. It means that instead of properly storing the compost, we are unintentionally causing it to be washed away during rainfall.

In order to properly store compost, it is necessary to install a roof. If that is not an option, plastic covers can be utilized to keep the compost in place during rainy

conditions.

Poor management can have serious consequences, especially during rainfall. Concentrated leachate may flow onto the ground or into streams, causing concern.

The Ministry of Environment, in collaboration with the Regional Environmental Offices and the local government, will notify compost owners to collect all of the compost piled on public lands, including the streams and banks, from mid-May to the end of June. If they fail to comply, we will charge them with illegal pile-up as per the relevant laws.

The Ministry has already checked and digitalized how compost is filed in the Nakdong River systems.

The level of how much compost was piled has been classified into three levels: "Concern," "Poor," and "Good." There's a stream and a road in this area. Unfortunately, most of the compost that is stored outside is inadequately stored, especially near the stream.

As previously mentioned, there are more than 1,500 compost piles in the Nakdong River systems, of which 40% are being stored improperly.

Given this situation, we will notify the owners of the compost and give them a notice to ensure moving the compost to the proper places or covering the compost. Failure to comply will result in pressing charges.

Local governments have a compost map that can be accessed through a QR code. Officials can use the code to locate compost areas and determine if they are being piled correctly or have any accumulation problems.

Based on this map, we will start a targeted crackdown.

Owners have until the end of June to address any unresolved issues regarding the compost. Failure to properly manage the compost after June will result in non-compliant owners being reported.

Of course, we will not press charges against them all. There are also support measures.

Compost is sometimes left in open-air conditions and piled on private lands. If we encounter such compost, we will inform the owners to install a cover and train them on what to do when it rains. In case of rain, we will send them a text message reminding them to cover the compost immediately.

Here's a helpful tip on managing open-air compost before it rains: consider using plastic covers to protect it. Additionally, we are developing a compost storage facility with financial assistance from national and local governments. This facility will feature a rain cover to protect the compost. The government is committed to supporting the construction of similar compost storage facilities with protective covers.

We have another item to revise regarding the regulations. In the case of non-fermented compost, if the quantity is small, such as less than 300 kg per day or 1 ton per month, compost manufacturers are permitted to supply the compost to arable farmers.

For compost to be suitable for use in the ground, it must undergo proper fermentation. If farms are given compost that hasn't been properly fermented, there is a high chance that it won't be stored correctly.

We guarantee that any improperly processed compost, no matter how small the amount, will not be distributed. Our commitment is to only distribute compost that has been properly processed and is suitable for ground use.

Effective immediately, owners of compost stored on public lands must ensure proper storage by the end of June to avoid any penalties. Failure to comply with this regulation will result in pressing charges by the appropriate authorities. We will provide training and plastic covers for compost stored on private lands to ensure proper storage. In addition, we are expanding our compost storage facilities to support compliance with regulations further.

It will end today's briefing.

<Question> Have you ever taken any measures to manage compost before? Additionally, could you provide the volume of compost rather than just the number of compost piles? Finally, do local governments have any available data on compost, as they will be responsible for it in the future?

You mentioned you would charge against owners who do not properly process compost. However, I think measures are needed to prevent compost from leaking if improperly collected. As individuals own compost, the local government cannot eliminate it alone. The local government should provide covers or similar solutions for unmanaged compost to address this issue, even after notifying the owners. It will help prevent the compost from flowing into the Nakdong River systems. Do you have any other ideas on how to address this issue?

<Answer> We have previously announced measures to manage compost. However, until last year, we only investigated its storage status. This year is the first time that compost has been collected and taken in accordance with relevant laws. I agree with you that basic conditions should be established first so that compost can be appropriately stored and managed.

It is against the law to store compost in public areas. The Act on the Management and

Use of Livestock Excreta clearly states that livestock excreta, compost, or liquified manure should not be disposed of in public water sources. If such actions are observed, the local government has the authority to order the removal of the excreta.

Failure to comply with this order can result in a penalty of up to one year of imprisonment or a fine of KRW 10 million or less. In the past, as you have mentioned, we only evaluated the status quo and did not impose strict orders. This is because it was a community matter. However, the water quality in the Nakdong River is worsening, and this year, the stream flow is below average. This is why we came up with additional measures.

<Question> We must address a critical problem regarding compost. It will remain in place if left unattended, even if we ask the owners to remove it. If they refuse to comply, we'll need to take action to prevent the compost from entering the Nakdong River. Do you have any ideas on how we can proactively prevent this from happening? Time is of the essence, and we need to take action quickly to avoid delays in reporting and addressing the issue.

<Answer> First of all, if the owner does not comply with the notice, it will depend on the scale, but if there is a large volume, we will have to execute it by proxy. For small volumes, we will cooperate with the local government and the Environmental Management Office to move the compost to a proper storage facility. There are storage facilities run by the government like this. We will move it to such facilities.

It's difficult to articulate the detailed volume of data for each local government in words due to its complexity when examining the figures. However, we can provide more information upon request as we have the necessary data. The sheer number of local governments makes it challenging to explain everything.

<Question> Just to clarify, there were laws in place previously, but we didn't file any reports. However, starting this year, we will begin filing reports. Is this right?

<Answer> We have two approaches when it comes to dealing with improperly stored compost in public areas, such as streams, bridges, and roads. If compost is stored in these areas, it is likely to flow into nearby streams during rainfall. To prevent this, we will press charges for any compost that is stored on public land near streams. However, we will give the owners enough time until the end of June to address the issue.

We will offer support measures like covers or additional storage facilities for compost stored on private lands far from streams. Regulations will be enforced, and support will be provided.

<Question> You discussed the Nakdong River. So, is this the only target area subject to these measures? Or will the measures be extended to all rivers?

<Answer> The area that we have looked into this year, as mentioned, with the QR code system to identify the proper storage of compost is the Nakdong River. Therefore, currently, only the Nakdong River has a QR code system in place that can report on the status quo.

We will try out the system this year and expand the measures to all four major river systems in 2024.