



2022 Privacy Impact Assessment

# FlashCAM: SPU Illegal Dumping Cameras

Seattle Public Utilities Clean City Division



Seattle  
Information Technology  
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## Privacy Impact Assessment overview

### What is a Privacy Impact Assessment?

A Privacy Impact Assessment (“PIA”) is a method for collecting and documenting detailed information collected in order to conduct an in-depth privacy review of a program or project. It asks questions about the collection, use, sharing, security, and access controls for data that is gathered using a technology or program. It also requests information about policies, training and documentation that govern use of the technology. The PIA responses are used to determine privacy risks associated with a project and mitigations that may reduce some or all of those risks. In the interests of transparency about data collection and management, the City of Seattle has committed to publishing all PIAs on an outward facing website for public access.

### When is a PIA required?

A PIA may be required in two circumstances.

- When a project, technology, or other review has been flagged as having a high privacy risk.
- When a technology is required to complete the Surveillance Impact Report process. This is one deliverable that comprises the report.

### How to complete this document?

As department staff complete the document, they should keep the following in mind.

- Responses to questions should be in the text or check boxes only, all other information (questions, descriptions, etc.) should **NOT** be edited by the department staff completing this document.
- All content in this report will be available externally to the public. With this in mind, avoid using acronyms, slang, or other terms which may not be well-known to external audiences. Additionally, responses should be written using principally non-technical language to ensure they are accessible to audiences unfamiliar with the topic.

## 1.0 Abstract

### 1.1 Please provide a brief description (one paragraph) of the purpose and proposed use of the project/technology.

Illegal dumping has become an increasingly large problem in Seattle. Seattle Public Utilities (SPU) Clean City Illegal Dumping Enforcement program proposes to utilize a camera system to assist in investigation of illegal dumping incidences on the public right of way. The cameras will allow for photos to be taken for later review. During post-incident review of illegal dumping photos may be submitted to the appropriate law enforcement entity if there is reasonable suspicion of criminal activity.

### 1.2 Explain the reason the project/technology is being created or updated and why the PIA is required.

In 2020, illegal dumping inspectors responded to 29,170 illegal dumping incidents throughout the City of Seattle. Illegal dumping offenders often choose to dump late at night, in remote areas of neighborhoods, isolated locations, greenbelts, or distressed low-income neighborhoods. These offenders do it to avoid the cost of transfer station fees and inconvenience of proper waste disposal. Offenders also know the likelihood of being caught is low. Illegal dumping is costing the City more than \$1.5 million dollars annually. The FlashCAM technology will be used to assist SPU's illegal dumping enforcement team in monitoring and deterring illegal dumping activities in some of these areas.

Illegal dumping can create health and safety hazards, cause surface and ground water pollution, degrade property values, negatively impact businesses, unfairly place clean-up responsibility on property owners, be offensive to residents, and result in high clean-up costs to the city. Responding to illegal dumping only by cleaning it up, as SPU currently does, will likely make the problem worse as dumping may be viewed as a free disposal option if there is no enforcement. Placing cameras at high frequency sites will help SPU, reduce the illegal dumping in our City.

SMC Code 21.36.920 states:

Violation of SMC Section 21.36.420 involving an amount of solid waste greater than one (1) cubic foot but less than one (1) cubic yard is a misdemeanor punishable as provided in [SMC Section 12A.02.070](#). For such a violation, the defendant shall also pay a litter cleanup restitution payment, which is the greater of twice the actual cost of removing and properly disposing of the litter or Fifty Dollars (\$50.00) per cubic foot of litter.

Violation of SM Section 21.36.425 involving an amount of solid waste greater than one (1) cubic foot but less than one (1) cubic yard is a misdemeanor punishable as provided in [SMC Section 12A.02.070](#). For such a violation, the defendant shall also pay a litter cleanup restitution payment, which is the greater of twice the actual cost of removing and properly disposing of the litter or Fifty Dollars (\$50.00) per cubic foot of litter.

SMC 21.36.922 refers to RCS 7.80.120 to categorizes illegal dumping as a civil infraction with a penalty of \$250 to maximum penalty of \$500, not including statutory assessments. Illegal accumulation is a Class 3 civil infraction with a maximum penalty of \$50, not including statutory assessments.

## 2.0 Project / Technology Overview

Provide an overview of the project or technology. The overview gives the context and background necessary to understand the purpose, mission and justification for the project / technology proposed

### 2.1 Describe the benefits of the project/technology.

The technology allows for SPU Clean City to detect and identify potential violators. Additionally, it provides documentation with evidence required to impose fines and/or penalties.

The technology will also act as a deterrent device that will aid stopping the act of illegal dumping from occurring.

Other department personnel may request to view photos and assist with implement crime prevention through environmental design and risk assessments.

### 2.2 Provide any data or research demonstrating anticipated benefits.

SPU Clean City team chose the Q-Star FlashCAM because of the voice warning system that gives the potential illegal dumper the opportunity to leave the area before photos are taken. We're hoping that individuals will leave the area and avoid having photos taken and potential illegal dumping fines.

The following cities use cameras:

Chicago reports having successfully used cameras to identify vehicles used for illegal dumping.

[https://www.chicago.gov/content/dam/city/depts/mayor/Press%20Room/Press%20Releases/2017/August/090617\\_IllegalFlyDumping.pdf](https://www.chicago.gov/content/dam/city/depts/mayor/Press%20Room/Press%20Releases/2017/August/090617_IllegalFlyDumping.pdf)

Oakland has cameras which allow the Litter Enforcement Officer (LEO) to review recent footage and to also observe real time activity from the LEO's office desk. The camera has the capability to view day and night footage and zoom in from as far as one block away, allowing clear views of a license plate and general descriptions of individuals.

<https://www.oaklandca.gov/news/2022/oakland-launches-illegal-dumping-surveillance-camera-pilot-program>

In Phoenix, the Environmental Specialists do surveillance of illegal dumping "hot spots", and in-progress events are called in directly to the police.

<https://www.phoenix.gov/district5site/Documents/District%205%20Projects%20and%20Accomplishments.pdf>

Many jurisdictions work closely with the municipal police department to provide extra resources: the police may issue tickets, respond to dumping-in-progress reports, and impound vehicles.

City of Philadelphia [CITY COUNCIL PASSES COUNCILMEMBER OH'S BILLS TARGETING ILLEGAL DUMPING AND ILLEGAL PARKING OF LARGE COMMERCIAL VEHICLES IN RESIDENTIAL NEIGHBORHOODS - Philadelphia City Council \(phlcouncil.com\)](#)

An example of our Illegal Dumping warning sign being ignored.

## Voice of the Customer

“The summer of 2022 has been the worst year we have witnessed for illegal dumping on 17th Ave NE since we moved here in 1995. I sincerely hope that the City of Seattle will work towards addressing this problem. Simply hauling away the garbage every day is not a solution. What are missing are two vital elements: (1) fines and penalties for these infractions, and (2) education. People need to be educated on the fact that dumping in the streets is not acceptable behavior, and there needs to be enforcement of laws to provide a penalty for these actions”.

“I’m looking forward to cleaner and more respectful times going forward”. – Ray K., Northeast Seattle



### 2.3 Describe the technology involved.

Vendor: Q-Star Technology  
MODEL: FCSX FlashCAM 880 SX System

The FlashCAM system by Q-Star technology is specifically designed to help cities and counties protect public spaces from illegal dumping, graffiti, and theft. FlashCAM is a deterrent system that allows SPU to be proactive vs. reactive to illegal dumping activities. Unique features of FlashCAM include motion-triggered strobe flash and customizable voice warning) to help stop illegal dumping before it occurs.

The camera captures high resolution images, that SPU may later review for enforcement in accordance with SMC 31.26.

Also, there is no third-party monitoring vendor for the FlashCAM system, only Seattle Public Utility Clean City illegal dumping enforcement employees will have access to any data collected on the FlashCAM camera.

### 2.4 Describe how the project or use of technology relates to the department’s mission.

Cameras will operate on City owned parcels that are likely to be in remote and isolated locations with limited public access. The cameras will be activated when an individual(s) or vehicle arrives in the area which then will capture photos of the act of illegal dumping.

This directly supports the department’s mission to reduce waste and aid in enforcement of illegal dumping.

The technology’s use for Illegal Dumping operations allows for quicker conveyance of information after an illegal dumping violation and additional review by subject matter experts.

### 2.5 Who will be involved with the deployment and use of the project / technology?

SPU Clean City Illegal Dumping Enforcement Team is responsible for use of the technology. Seattle City Light will assist with the installation of camera(s) on their pole(s).

## 3.0 Use Governance

Provide an outline of any rules that will govern the use of the project / technology. Please note non-City entities are bound by restrictions specified in the Surveillance Ordinance and Privacy Principles and must provide written procedures for how the entity will comply with any restrictions identified.

### 3.1 Describe the processes that are required prior to each use, or access to/ of the project / technology, such as a notification, or check-in, check-out of equipment.

Illegal Dumping Hot Spots will be identified by data collected from the City of Seattle Motorola CSR System Illegal Dumping Complaint Service Request.

- A “Hot Spot” area will be under review to see if it’s a seasonal trend or an ongoing illegal dumping problem site.
- What type of illegal dumping is occurring: construction waste, yard waste, household garbage debris, etc.
- What type of neighborhood – residential, commercial, mixed.
- Area type: alley, greenbelt, dead end, etc.

Community Outreach will be conducted to present the camera and bring awareness to the illegal dumping issue in the area and gather community feedback.

- Door to door visitation with door hanger explaining the purpose of the camera.
- Mailouts that show location where camera will be mounted.
- Signage posted states: “Don’t Dump on Seattle. This area is under surveillance”, with the phone number to SPU’s illegal dumping team.
- Attend Community meetings.

Citizens in each area will be given 30 business days to respond to Illegal Dumping Enforcement team with their concerns regarding the FlashCAM camera.

The FlashCAM cameras will be strategically placed in areas that only capture City right of ways with limited public access.

The camera can store up to 1800 to 3000 pictures. After the memory is full it can be configured to “overwrite” the oldest images in First In First Out (FIFO) manner.

Only Illegal Dumping inspectors can access the photos from the camera.

The camera footage will also require passwords known only to the SPU Clean City Illegal Dumping Enforcement Team.

The cameras will only be activated when a vehicle or persons trespasses on an unrestricted area. In the case of an illegal dumping violation inspectors will review the camera footage.

Before the camera starts taking photos, it will give a warning to the potential intruder with a motion triggered strobe flash and customizable voice warning to deter any illegal dumping activity.

No check-out is required prior to use, only a login to the camera’s memory.

Camera inspections will be regularly conducted by Illegal Dumping personnel. At the time of inspection any unrelated illegal dumping activities, persons, and vehicles captured by the camera will be permanently deleted from the camera’s memory.



All persons and vehicle that are not part of the illegal dumping act will be “blotted out, covered or cropped out” of the photo.

Only photos that are related to the act of illegal dumping will be stored on the Department’s OneDrive file that is only accessible to SPU’s illegal dumping enforcement team.

### **3.2 List the legal standards or conditions, if any, that must be met before the project / technology is used.**

According to SMC 21.36 Seattle Public Utilities Illegal Dumping team is designated as the enforcement agency for all litter and illegal dumping control incidents within the corporate limits of The City of Seattle. All persons on the Illegal Dumping team must have completed and be in good standing in Privacy and Information Security Awareness Training.

### **3.3 Describe the policies and training required of all personnel operating the project / technology, and who has access to ensure compliance with use and management policies.**

According to SMC 21.36 Seattle Public Utilities Illegal Dumping team is designated as the enforcement agency for all litter and illegal dumping control incidents within the corporate limits of The City of Seattle. All persons on the Illegal Dumping team must have completed and be in good standing in 2022 Privacy and Information Security Awareness Training.

SPU/City of Seattle: In the Seattle Municipal Code (SMC), all five of these groupings are included in Subchapter V Litter Control Code of Chapter 21.36 Solid Waste Collection. (The complete wording is included in APPENDIX A). SMC sections include:

- 21.36.420 Unlawful dumping of solid waste,
- 21.36.425 Accumulation of solid waste,
- 21.36.430 Unlawful use of City litter receptacles
- 21.36.440 Unlawful use of solid waste container on private property, and
- 21.36.450 Fee on unsecured loads.

At SPU, sections 420 and 425 have been considered and enforced as illegal dumping, which is typical for most jurisdictions.

This is a Pilot Project, based on the data we’ll be collecting will determine future training and procedures development.

## **4.0 Data Collection and Use**

Provide information about the policies and practices around the collection and use of the data collected.

### **4.1 Provide details about what information is being collected from sources other than an individual, including other IT systems, systems of record, commercial data aggregators, publicly available data and/or other city departments.**

SPU Illegal Dumping will be collecting and managing all the data generated by the FlashCAM system. There is no 3<sup>rd</sup> Party Vendor that will review the FlashCAM photos. No information from other sources is collected by this technology. Information will be stored on a City of Seattle secure OneDrive file.

#### **4.2 What measures are in place to minimize inadvertent or improper collection of data?**

The Department is working to develop a policy for the Illegal Dumping Enforcement team regarding the acceptable use of this technology during SMC code enforcement, as well as the subsequent storage of photos and sharing with law enforcement agencies.

All photos that capture persons not involved in the act of illegal dumping or without intention to illegally dump debris on the public right of way will be deleted. Photos reviewed that don't contain any illegal dumping activity will be immediately deleted. Also, persons and vehicles that are not involved with the illegal dumping activity will be redacted, covered, or cropped out of the photo.

The Camera will be strategically placed in areas that only capture City right of ways with limited public access.

The FlashCAM is activated by motion, after 30 seconds a bright flash will illuminate the area, and a prerecorded message will warn the individual(s) that the area is being monitored please leave the area, if you choose to stay in the area, your activities will be photographed.

Clear notice will be provided by visible signs to inform the public that there are illegal dumping cameras in use.

#### **4.3 How and when will the project / technology be deployed or used? By whom? Who will determine when the project / technology is deployed and used?**

SPU's Illegal Dumping Enforcement team will use the cameras. Seattle City Light may help with initial setup and deployment, as they own the poles the FlashCAM will be attached to.

#### **4.4 How often will the technology be in operation?**

The FlashCAM will be operating in selected areas seven days a week and 24 hours a day.

FlashCAM is activated by motion, after 30 seconds a bright flash will illuminate the area, and a prerecorded message will warn the individual(s) that the area is being monitored please leave the area, if you choose to stay in the area, your activities will be photographed. If the individual(s) leave the FlashCAM no photos will be taken.

Once illegal dumping activities in the area where the FlashCAM is stationed decreases the Illegal Dumping Enforcement team will move the camera to the next area that is being impacted by illegal dumping.

#### **4.5 What is the permanence of the installation? Is it installed permanently or temporarily?**

The FlashCAM would be in the area temporarily. When illegal dumping activity decreases it will be moved to another illegal dumping location.

#### **4.6 Is a physical object collecting data or images, visible to the public? What are the markings to indicate that it is in use? What signage is used to determine department ownership and contact information?**

The camera monitor will be installed on a City-owned light pole, or structure and may potentially be viewed by onlookers or the public.

Signage will also be placed in a visible area notifying the public in the area the FlashCAM is in use.

Contact information for the SPU's Illegal Dumping department will be included on signage.

#### **4.7 How will data that is collected be accessed and by whom?**

Data is collected only when the cameras are activated. Photos will be viewed only by SPU personnel and accessible to the Illegal dumping teams. In some cases, some photographs may be shared with appropriate law enforcement, in order to enforce fines as required.

Photos will be transferred from the camera to a held surface/iPad type into a secured City OneDrive file.

In the case the camera did not capture an illegal dumping violation the photograph will be immediately deleted. If there was a violation captured the footage may be also shared with law enforcement or the City's hearing examiner.

#### **4.8 If operated or used by another entity on behalf of the City, provide details about access, and applicable protocols. Please link memorandums of agreement, contracts, etc. that are applicable.**

Respond here. Please do not include staff names, roles, or functions only. No other outside entity will operate or have access to the photo on the FlashCAM.

#### **4.9 What are acceptable reasons for access to the equipment and/or data collected?**

The following are considered acceptable reasons to access the equipment and/or the data collected.

- Illegal Dumping violation response, at the Inspectors discretion.
- Public Records (some exemptions may apply).
- Discovery for litigation purposes.
- Sharing of information with law enforcement and/or the City hearing examiner.

#### **4.10 What safeguards are in place, for protecting data from unauthorized access (encryption, access control mechanisms, etc.) and to provide an audit trail (viewer logging, modification logging, etc.)?**

Photos from Illegal dumping violations will be retained on a secured OneDrive file only accessible to members of the Illegal dumping enforcement team. A new policy will be developed to track and log all disclosures of illegal dumping public disclosure requests.

## 5.0 Data Storage, Retention and Deletion

### 5.1 How will data be securely stored?

To access the data from the FlashCAM requires a key fob and passwords known only to illegal dumping enforcement inspectors. Only SPU illegal dumping enforcement inspectors and the SPU Clean City director can access the photos. Any data captured by the FlashCAM will remain in the camera until the inspector transfers the data to our secure OneDrive file.

Also, the camera can store up to 1800 to 3000 pictures. After the memory is full it can be configured to “overwrite” the oldest images in First In First Out (FIFO) manner.

Camera inspections will be regularly conducted by illegal dumping enforcement personnel. At the time of inspection any unrelated illegal dumping activities, persons, and vehicles captured by the camera will be permanently deleted from the camera’s memory.

Only photos that are related to the act of illegal dumping will be stored on the Department’s OneDrive file that is only accessible to illegal dumping personnel.

### 5.2 How will the owner allow for departmental and other entities, to audit for compliance with legal deletion requirements?

Seattle Public Utilities Clean City illegal dumping enforcement team is responsible for ensuring data and deletion requirements are met.

### 5.3 What measures will be used to destroy improperly collected data?

All photos that are not related to the act of illegal dumping or other criminal offensive activity will be deleted once reviewed by the illegal dumping inspector.

Deletion of photos occurs in accordance with the Department’s retention schedule and occurs at the device level. Persons and vehicles that are not involved with the illegal dumping activity will be redacted, covered, or cropped out of the photo.

### 5.4 Which specific departmental unit or individual is responsible for ensuring compliance with data retention requirements?

SPU Clean City Division.

## 6.0 Data Sharing and Accuracy

### 6.1 Which entity or entities inside and external to the City will be data sharing partners?

If an Illegal dumping violation is captured it may be shared with the City’s or SPU’s hearing examiner, law department or law enforcement for investigation and or fines and penalties. The Department will work to develop a policy update that addresses the how the data from this technology is shared.

## 6.2 Why is data sharing necessary?

SPU personnel may encounter information from the camera footage that is evidence of unlawful activity. For example, an illegal Dumping incident where a vehicle drops off hazardous waste, and other materials on a dead end or wooded area in the City of Seattle. Photos would then be shared with law enforcement partners as evidence of potential criminal activity.

## 6.3 Are there any restrictions on non-City data use?

Yes  No

6.3.1 If you answered Yes, provide a copy of the department's procedures and policies for ensuring compliance with these restrictions.

Respond here.

## 6.4 How does the project/technology review and approve information sharing agreements, memorandums of understanding, new uses of the information, new access to the system by organizations within City of Seattle and outside agencies?

The department will work to develop an additional policy for the illegal dumping team regarding the acceptable use and sharing of the data with law enforcement and any outside agencies.

## 6.5 Explain how the project/technology checks the accuracy of the information collected. If accuracy is not checked, please explain why.

SPU's Illegal Dumping Enforcement Team will evaluate the accuracy of data, and dispose of data or photos that are not needed (e.g., if no illegal dumping has occurred). They will validate the information captured through SPU's existing mechanisms for enforcement of illegal dumping activities.

## 6.6 Describe any procedures that allow individuals to access their information and correct inaccurate or erroneous information.

This may be completed through the public disclosure process.

# 7.0 Legal Obligations, Risks and Compliance

## 7.1 What specific legal authorities and/or agreements permit and define the collection of information by the project/technology?

SMC 32.32.030 Seattle Public Utilities is designated as the Illegal dumping enforcement Agency for all illegal dumping incidents within the corporate limits of The City of Seattle.

## 7.2 Describe what privacy training is provided to users either generally or specifically relevant to the project/technology.

SPU personnel are required to complete the City's Annual Privacy & Security Awareness Training. SPU will work on developing a policy that addresses the use of this technology, photo retention, and sharing of records with law enforcement. Training for users will be included in this policy.

**7.3 Given the specific data elements collected, describe the privacy risks identified and for each risk, explain how it was mitigated. Specific risks may be inherent in the sources or methods of collection, or the quality or quantity of information included.**

**Risk:** Vehicles or persons accessing sensitive areas may be captured during camera activation.

**Mitigation:** This risk is mitigated by way of data access controls and camera placement. More specifically, the only people with access to the photos are illegal dumping enforcement personnel. Also, cameras will be positioned to capture areas not intended for vehicle or pedestrian access. Individuals inadvertently that are not part of the illegal dumping activity will be blurred out of photos.

Additionally, before the camera starts taking photos, it will give a warning to the potential intruder with a motion triggered strobe flash and customizable voice warning to deter any illegal dumping activity.

**7.4 Is there any aspect of the project/technology that might cause concern by giving the appearance to the public of privacy intrusion or misuse of personal information?**

Sharing of incident records with law enforcement is likely cause of concern. During the camera pilot SPU will explore to developing a policy that addresses the sharing of records with law enforcement, to mitigate this concern.

## 8.0 Monitoring and Enforcement

**8.1 Describe how the project/technology maintains a record of any disclosures outside of the department.**

Disclosures to any other entities, including the public, are only authorized if processed and approved by the Department's Public Disclosure Officer.

**8.2 What auditing measures are in place to safeguard the information, and policies that pertain to them, as well as who has access to the audit data? Explain whether the project/technology conducts self-audits, third party audits or reviews.**

During this pilot we will be collecting data, photos, and began developing a policy on disclosure, tracking and retention of Illegal Dumping records and incorporating it into the SPU's Illegal dumping enforcement policies and operating guidelines. SPU illegal dumping enforcement team owns the equipment and will be conducting self-audits. If, there is a problem with the equipment, it will be returned to the vendor without photos of activities captured by the camera.

All users will be required to take the City's Annual Privacy & Security Awareness Training.