

CUSTOMER

Alburtis is a borough in Lehigh County, PA and a suburb of Allentown, PA in the Lehigh Valley region of the state. Residents in the borough of Alburtis, PA, can dispose of lawn clippings, tree limbs and shrubs at the local yard waste center. However, Lehigh County needed to prevent disposal at the center of prohibited items such as construction debris, propane tanks and household garbage.

CHALLENGE

The borough has a lot at stake in its efforts to prevent illegal dumping -- from possible damage to the environment to harmful fumes, toxicity and deadly fire risk. More specifically, the Alburtis Police Department wanted the ability to clearly identify anyone dumping prohibited items, and to see what type of materials they were dumping via remote video monitors at the police station and borough building.



Look Closer™
Case Study

Arecont Vision Cameras Efficiently Reduce Illegal Dumping in Pennsylvania

Three Arecont Vision Megapixel Cameras Combine Broad Coverage with Precise, Detailed Image Clarity



Arecont Vision's multi-megapixel cameras help keep a watchful eye over illegal dumping of waste in Alburtis, Pennsylvania.

MEGAPIXEL SOLUTION

Alburtis was able to accomplish its surveillance objectives with a video surveillance system that uses only three cameras – two Arecont Vision MegaDome® AV1355DN 1.3 Megapixel H.264 Day/Night Dome Cameras for license plate viewing, and one Arecont Vision 180-degree Panoramic AV8185 8 Megapixel H.264 Camera for a compre-

hensive view of the waste center yard. The single panoramic camera installed provides as much coverage as up to 24 standard resolution cameras.

The borough turned to Michael Miller, President of The Wire Guys located in Alburtis, PA to design and install the cameras, server, system setup, and provide training. Mr. Miller recommended Arecont Vision cameras because of their competitive price-

AV1355DN

1.3 Megapixel H.264 IP MegaDome™ Camera

Key Features

- 1280(H) x 1024(V)
- 15 fps @ 1280(H) x 1024(V)
- H.264 (MPEG4, Part 10), Motion JPEG
- 0.1 Lux @ F1.4, Day/Night 0 Lux, IR Sensitive
- Integrated MP Camera, MP Lens, Dome Housing
- IP66 Weatherproofing
- Vandal Resistant



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3 strategically placed Arecont Vision Megapixel Cameras capture illegal dumping activity at the Alburtis, PA waste facility.

ing, H.264 compression to minimize bandwidth and storage needs, and because of the availability of a 180-degree panoramic megapixel solution.

The newly installed system at Alburtis' yard waste center is integrated with an existing video surveillance system at the borough building/police station via a cable modem that streams live video back to the police station for remote live viewing and web viewing from police cars over a cellular network. The system employs network video recorder (NVR) software from Exacq Technologies and a Wire Guys custom-built network video recorder (NVR) with 750 GB of storage. The collaboration between Arecont Vision and Exacq Technologies ensured interoperability of Arecont Vision's megapixel cameras with the ExacqVision NVR platform.

The Arecont Vision MegaDome® AV1355DN 1.3 Megapixel H.264 Day/Night Dome Cameras provide 1280x1024-pixel images at 32 frames per second. The all-in-one integrated camera, lens and IP66-rated dome housing features a 1/2" CMOS sensor and Arecont Vision's MegaVideo® technology that processes video at 80 billion operations per second. The camera uses H.264 (MPEG 4, Part 10) compression

to minimize bandwidth and storage requirements while maintaining real-time image frame rate. Additional capabilities include motion detection, image cropping and region-of-interest streaming. Light sensitivity of 0.1 lux at F1.4 enables low-light viewing and recording, and the day/night version used by the borough of Alburtis has a motorized infrared (IR) cut filter.

The Arecont Vision 180-degree Panoramic AV8185 8 Megapixel H.264 Camera with MegaVideo® technology is an 8 megapixel network camera with four 2-megapixel sensors that provides up to 6400x1200-pixel images at 5.5 frames per second (fps). The camera can be set for lower resolutions at higher frame speeds, such as 1600x1200-pixel images at 22 fps or 800x600-pixel images at 88 fps, and combines both H.264 (MPEG 4, Part 10) and JPEG compression. Light sensitivity is 0.2 lux at F2.0, and the AV8185 provides image cropping with

up to four regions of interest.

The Arecont Vision cameras provide the borough of Alburtis with an ideal combination of HD image quality, variable frame rates, low bandwidth, and lower storage requirements.

“ Arecont Vision gave us the ability to meet the customer's system requirements with only three cameras, which would not have been possible with any other imaging solution on the market. ”

MEGAPIXEL BENEFITS

During the proposal phase of the project, users at the borough were almost instantly impressed and convinced that the exceptional resolution and coverage capabilities of Arecont Vision's megapixel solutions provided the resolution they needed for both real-time and playback modes to enforce local ordinances. Alburtis system operators can zoom in for up-close views, even on stored images, view specific parts of a larger image – a person's face or a license plate number – without any loss of detail.

The Arecont Vision cameras have proven to the borough that megapixel imaging is suitable for almost any application and represents a significant upgrade in system functionality compared to standard-resolution cameras. In addition to lower bandwidth and storage requirements, megapixel cameras dramatically decrease costs related to other elements of a system, such as fewer software licenses, less cabling, fewer

lenses, and a decrease in the man-hours needed to implement the system.

The system has already proven successful to date allowing the police to identify and issue citations to people who discard anything but acceptable yard waste. "People were using the location to discard everything from old decks and propane tanks to household trash," said Alburtis Police Chief Robert Palmer. "We wanted a system that could be used to identify people's faces, to read their license plates and to see what they are disposing of. We were able to meet those requirement using only three Arecont megapixel cameras as part of a simple system at a very reasonable cost."

"The customer is very happy with the system and has had no issues," said Mr. Miller. "Arecont Vision gave us the ability to meet the customer's system requirements with only three cameras, which would not have been possible with any other imaging solution on the market."



Arecont Vision is the leading manufacturer of high-performance megapixel IP cameras and associated software. Arecont Vision products are made in the USA and feature low-cost massively parallel image processing architectures MegaVideo® and SurroundVideo® that represent a drastic departure from traditional analog and network camera designs. All-in-one products such as MegaDome® and MegaView™ provide installer friendly solutions. Compact JPEG and H.264 series of cameras address cost sensitive applications. These innovative technologies enable Arecont Vision to deliver multi-megapixel digital video at IP VGA camera price points.

 **Arecont Vision**
megapixel technology...
beyond imagination