**EXECUTIVE SUMMARY**

Traditional biosolids management options are becoming less acceptable to the public and more difficult to permit in an increasingly stringent regulatory environment. To respond to these challenges, two Southern California wastewater treatment agencies have partnered in the development of a new, state-of-the-art biosolids management facility, the Inland Empire Regional Composting Facility (IERCF). The IERCF is the nation's largest indoor biosolids composting facility and includes numerous environmental control features allowing it to meet the stringent local air quality regulations and to minimize its impacts to the surrounding community. To fully enclose the composting process, an existing 410,000 sq. ft. warehouse was extensively renovated. One of the main environmental control features is that all the air collected in the enclosed building is vented to a 3-acre biofilter that removes over 80% of the ammonia and VOCs generated in the composting process. Over almost four years of continuous operation, the facility has cost effectively operated in compliance with all permit conditions and with no significant complaints from the public. The facility processes approximately 150,000 tons of biosolids per year, and turns the material into a nutrient-rich compost material. The finished material is sold in bulk to a varied customer list and generates over $650,000 in revenue per year.

**I. DESIGN OF COMPOSTING SYSTEM**

**BACKGROUND:** Publicly Owned Treatment Works (POTWs) in southern California face ever-increasing challenges to biosolids management. Despite decades of proven, cost-effective operation, traditional biosolids management options of landfilling and land application are becoming less acceptable to the public. In addition, local regulations have made it onerous to site any new biosolids management facility, even those thought to be technically superior to landfilling or land application. Recognizing the vital need for expanded biosolids management capacity in southern California, two major wastewater treatment plant operators, the Inland Empire Utilities Agency (IEUA) and the Sanitation Districts of Los Angeles County (Districts), decided to partner in the development of a new, state-of-the-art biosolids management facility. The two agencies, through a Joint Powers Authority (JPA) formed in 2002, jointly evaluated composting of biosolids as an economically and environmentally sound method of beneficially reusing biosolids. Based on the findings of the preliminary evaluation, the JPA authorized the formation of the Inland Empire Regional Composting Authority (IERCA), with the mandate to design, construct, operate and maintain a state of the art biosolids co-composting facility in Southern California.
Rather than attempting to site a more conventional outdoor composting operation, the IERCA was tasked with developing a fully enclosed facility in order to meet the stringent local air quality regulations and to allow for public acceptance of the facility within urbanized southern California. In 2002, IERCA purchased an existing warehouse site located in an industrial area of the City of Rancho Cucamonga, California, to be used for the construction of a co-composting facility. The site, located adjacent to IEUA’s Regional Wastewater Treatment Plant No. 4, encompassed 24 acres and included an existing 410,000 square foot warehouse. Utilizing the existing warehouse to house the composting facility, the Inland Empire Regional Composting Facility (IERCF) was designed as a state of the art, negatively aerated static pile, biosolids co-composting facility. Construction of IERCF began in 2003 and was completed in 2007 at a cost of approximately $80 million. This one of a kind facility, is the nation’s largest indoor biosolids composting facility and includes numerous environmental control features. Over three years of continuous operation, the facility has cost effectively operated in compliance with all permit conditions and with no significant complaints from the public.

**DESIGN:** At a typical composting facility, all or a portion of the operations occur outside. On the contrary, a key feature of the IERCF design is that the entire composting process (amendment receiving/storage, biosolids receiving/mixing, active composting, screening, curing and product load out) is enclosed within a single building with the exhaust air from all of these process areas treated in an organic biofilter designed to control facility odors and emissions. This unique design ensured compliance with local air quality regulations and minimized impacts to the surrounding community. The IERCF was designed to largely maintain the exterior of the existing warehouse building to allow the structure to blend in with the character of the surrounding neighborhood, but included extensive internal modifications to allow for the installation of mechanized material handling and ventilation systems to support the processing of the compost materials.

Inland Empire Regional Composting Facility
1) Indoor Composting Facility (410,000 sq.ft.) 2) Compost Storage Facility (144,000 sq.ft.);
3) Biofilter (3-acre); 4) IEUA Wastewater Treatment Plant RP-4
The IERCF is a large-scale composting facility that can process approximately 60,000 wet tons per year of amendment and 150,000 wet tons per year of biosolids. The composting process from feedstock to finished compost takes approximately 60 days to complete. Incoming trucks delivering biosolids and amendment enter the receiving area through high-speed roll up doors that close after each entry to minimize escaping, dust, odors, and air emissions. The incoming material is loaded into large amendment and biosolids hoppers, located in the receiving area. These hoppers feed the materials onto belt conveyors that convey it in the appropriate ratio to a mechanical mixer (pug mill) for blending into the optimum ratio to support composting operations. The blended material is then conveyed via mechanical conveyors to the active composting area where windrows, approximately 12-ft tall, 175 feet long and 20 feet wide are constructed using front-end loaders. The active composting area is approximately 161,120 sq. ft., and accommodates approximately 35,000 cubic yards of material in 22 windrows. The duration of the active composting process is approximately 21 days, with a total daily input of 800 wet tons or 1,700 cubic yards. The static pile windrows are constructed over an aeration system, which draws air down through the pile at a maximum rate of 2.5 cubic feet per minute per cubic yard of compost and into an in-ground pipe and spigot system through hundreds of small air distribution grates in the floor. Each static pile has a dedicated aeration blower that exhausts to the facility’s biofilter – this airflow is referred to as “process” air. In addition, a separate air collection system is maintained for the interior of the building to maintain a suitable working environment – this air is referred to as “ventilation” air. All the air in the building is exchanged with fresh air from outside the building at least 6 times per hour whenever people are inside the building. The two air streams are combined prior to treatment in the biofilter.

After composting, the material is transported to the curing area. The curing process takes approximately 30 days. Again, the material is formed into windrows with the same dimensions as the composting piles. The curing area is equipped with the same in ground aeration and building air ventilation system as in the composting area, which also vents to the facility’s biofilter. The curing area aeration system was purposely designed so that the area could be used for active composting, if necessary. After curing, the material is conveyed to the screening area for sizing as a finished product. Different screens are used to produce different end products, as some end use applications (e.g. golf course turf amendment) require the use of finer materials. Larger, oversized material is re-used at the head end of the process as amendment while material passing through the screens is finished compost. The screening area is equipped with a ventilation system and bag house designed to remove and capture dust generated from screening operations. After screening, the finished compost is moved to the load out area. The load out area has been designed such that loading activities also occur within the enclosed
building. Similar to the receiving area of the facility, the load out area uses high-speed rollup doors to keeps dust and odors associated with loading contained within the facility.

The facility's air treatment system consists of a humidification vault and 3-acre organic biofilter, which is located outside and adjacent to the facility. The humidification system adds moisture to the air stream to enhance biofilter performance and help to prevent dry pockets, which can lead to air short-circuiting, from developing within the biofilter media. The biofilter itself is an aboveground structure, with a wood chip organic media mixture. Its design airflow rate is 813,200 cfm and consists of 12 cells, which operate in parallel. During typical conditions, the biofilter treats approximately 450,000 cfm. The biofilter dimensions are approximately 1,130-ft X 131-ft (134,600-ft²) with a media depth of approximately 8-ft, providing at least 60-seconds of exhaust air contact time. An extensive irrigation system has been installed over the biofilter to ensure that optimum moisture conditions for the biological organisms within the biofilter are maintained. The biofilter is designed to remove odorous compounds and other emissions from the process air exhaust from within the building.

Environmental protection is a cornerstone of the IERCF design. As noted above, the entire process from biosolids/amendment receiving to finished product load out is performed within the facility, which is maintained under negative pressure ensuring that odors and dust are kept within the facility. Air is exchanged within the building at least 6 times per hour to create a safe working environment, and all air is exhausted to the biofilter. Conservation of resources such as water is also addressed at the facility. The humidification pre-treatment vault for the biofilter uses recycled water from the neighboring IEUA wastewater treatment plant to humidify the airstream before it is vented through the biofilter. In addition, the irrigation system installed over the entire 3-acre biofilter surface uses recycled water to maintain an optimum moisture level throughout the biofilter media.

Environmental compliance activities are an important part of the operation of the facility, as discussed in more detail under Section 2 below. In particular, the biofilter operation is carefully monitored and controlled ensuring optimum conditions for odor removal performance and regulatory compliance. As part of this monitoring, comprehensive source testing of the biofilter is conducted on a periodic basis to confirm that the biofilter is performing as expected.
Energy efficiency is also a top priority for the IERCF. Energy efficient lighting, motors, and blowers are used throughout the facility, which has a 2-megawatt energy demand. In order to offset this high-energy demand, over 6,000 solar panels, mounted on the roof of the facility, provide sufficient capacity to generate up to one-megawatt of electricity, which at peak performance cuts IERCF’s need to purchase electricity by up to 50%.

The IERCF location, design and rigorous operational and environmental controls have resulted in an environmentally sound, cost effective, biosolids co-composting facility that operates in harmony with the surrounding community.

2. REGULATORY COMPLIANCE

The IERCF is a fully permitted co-composting facility sited in the City of Rancho Cucamonga, California, which is located within the South Coast Air Quality Management District (SCAQMD). In 2003, the SCAQMD adopted one of the most stringent air quality rules governing co-composting projects in the country. SCAQMD Rule 1133.2 entitled “Emission Reductions from Co-composting Facilities” is designed to reduce volatile organic compounds (VOCs) and ammonia emissions from co-composting facilities. The Rule requires that co-composting facilities located within the SCAQMD’s air district utilize best management practices to reduce VOC and ammonia emissions originating from co-composting operations by a minimum of 80%. At IERCF, this was accomplished by exhausting all the process air and air exhausted from within the facility to the facility's biofilter, which is designed to control odors and remove over 80% of IERCF's VOC and ammonia emissions.

IERCF was initially issued two Permits to Construct by the SCAQMD. One permit, which covers operational parameters for the facility, provides for a maximum annual throughput rate of 209,625 wet tons per year, and a monthly throughput rate of 17,715 wet tons per month. It stipulates among other things that the design exhaust air capacity for the entire enclosed facility (813,200-cfm) is to be treated utilizing a biofilter. The other SCAQMD permit, which is associated with the biofilter, sets design and operational constraints as well as performance standards for the biofilter. It establishes a minimum VOC and ammonia control efficiency of 80% (or greater) and specifies how and when compliance testing is to be conducted. Meeting the SCAQMD permit requirements requires a rigorous operations plan and monitoring program. Routine inspection of IERCF's complex air distribution and ventilation system ensures that the facility is operating as designed. Careful operation and maintenance of the biofilter is required along with routine monitoring to ensure that key operational parameters such as the total air flow rate, air flow distribution and pressure differential (across the biofilter), media moisture content, and media quality are maintained.
As demonstrated through comprehensive source testing of the air from the biofilter after treatment, the facility far exceeds the minimum regulatory requirements for VOC and ammonia capture. In addition, the facility has not received any odor complaints in over three years of operation.

IERCF operates in compliance with all state and local regulations regarding co-composting operations as well as with all of the provisions contained in the following permits:

- City of Rancho Cucamonga, California
  Conditional Use Permit DRC2003-00097
- South Coast Air Quality Management District
  Permit to Operate No. G10583
  Permit to Construct No. 505862
  Permit to Construct No. 482529
- CalRecycle
  Solid Waste facility Permit No. 36-AA-0423
- State Water Resources Control Board
  Stormwater Discharge Permit WDID No. 836C330308

3. PLANNING

In planning for the design, construction, and operation of IERCF, the primary goal was to create an environmentally sound, cost effective co-composting facility that produced a high quality compost material in compliance with all local, state, and federal regulations. In addition, the intent was to build this facility within the urbanized area of southern California to minimize truck traffic associated with hauling the biosolids to more distant facilities. Facing the challenge associated with siting a large-scale composting facility in one of the most rigorous permitting environments in the United State was achieved by employing a team approach to the planning process that drew expertise from both the IEUA and Districts engineering and management staff as well as from numerous consultants and experts in the composting industry.

Because large parcels of land located within the Districts service area (Los Angeles County) are difficult and costly to obtain, an early decision in the planning process was to locate IERCF within IEUA’s 242 square mile service area located in the southwest corner of San Bernardino County, approximately 35 miles east of Los Angeles. The IEUA service area includes many industrial areas with good vehicular access, and fully developed utility infrastructure, which were well suited for siting a co-composting facility. With the general location decided, numerous criteria were evaluated before the IERCF location was finally selected. Once the site had been selected, the planning effort focused on the design and construction of the co-composting facility and all the ancillary facilities including the administration building, laboratory/testing facilities, equipment maintenance facilities, compost storage building, etc. The proximity of the selected site to IEUA’s Regional Water Recycling Plant No. 4 (RP-4) allowed planners to incorporate the use of RP-4’s recycled water supply, emergency power supply, and wastewater treatment capability into the IERCF design. Careful consideration was given to the site layout to ensure IERCF would have safe, easy access for the feedstock haulers as well as for the finished compost customers. Although the composting operation is completely enclosed, considerations such as the prevailing wind direction and proximity to neighbors were made in determining the optimum access road layout and for the location for the 3-acre biofilter and 144,000 sq. ft. (3.3 acre) compost storage facility. During this planning phase, considerable attention was also given to the appearance of IERCF and that of the access roads, scale areas, building exteriors, biofilter, compost storage facility and site landscaping. The intent was to blend the facility into the surrounding industrial community while maintaining a neat, clean and orderly overall appearance.
During the planning process, efforts also focused on understanding the regional compost market and developing a specific market for IERCF's finished compost. An early determination was that compost sales in the region typically followed a seasonal trend with peak sales occurring in the spring and summer months associated with typical seasonal patterns for implementation of landscape projects. However, biosolids production is typically fairly uniform throughout the year and the material needs to be managed on a regular basis. As such, the planning process identified the need for the compost storage facility to allow for surplus compost material to be stored during fall and winter. The 144,000 sq. ft. compost storage facility has capacity for over 50,000 cubic yards of material, which provides ample storage for compost produced when sales are slow while ensuring an adequate supply of compost during peak sales periods. Early participation with compost industry organizations such as the Association of Compost Producers and the U.S. Composting Council proved invaluable in gaining insight into the compost industry. Through these industry partnerships and study of the local compost market, it became apparent that IERCF’s ability to consistently produce a premium, quality compost would set IERCF compost apart from other compost produced in the region. As a result, marketing efforts focused on highlighting the quality and consistency of IERCF compost to distinguish it from other lower quality compost and help in developing a targeted market. From the planning effort came the development of the Soilpro brand name for IERCF compost. Soilpro customers are ensured of getting consistent, premium quality compost that meets the standards of the U.S. Composting Council’s Seal of Testing Assurance Program.

The planning effort that went into the development of IERCA and the Soilpro compost brand has paid off. IERCF is a cost effective, environmentally sound facility that has been in continuous operation since 2007. The Soilpro brand has become synonymous with premium compost and IERCF’s ability to store finished compost on site have lead to sales with large commercial compost users who require a steady supply of Soilpro compost throughout the year. The planning effort has resulted in annual sales of over $650,000 in just over 3-years of operation and this revenue stream helps to offsets IERCFs operations and maintenance costs.

4. PERFORMANCE, ECONOMICS, COST-EFFECTIVENESS

IERCF has been in continuous operation since its initial startup in April 2007. Through the end of 2010, the facility has processed over 360,000 wet tons of biosolids, 195,000 wet tons of green and wood waste and
sold over 580,000 cubic yards of Soilpro compost. In 2010, the facility processed over 205,000 wet tons of biosolids and amendments (approximately 98% of the facility's permitted throughput); processed over 11,500 truck trips; logged over 40,000 work hours with no reportable injuries or lost time accidents; generated 1,448 megawatt hours of clean, renewable solar power; and welcomed over 1,000 visitors. The facility continues to operate efficiently processing nearly 600 wet tons of recycled products each day.

The operations and maintenance cost for processing IEUA and Districts biosolids into Soilpro premium quality compost at IERCF is $44 per wet ton, which is comparable with other biosolids management options currently available throughout southern California. Keeping IERCF's processing cost competitive with other biosolids management alternatives is possible due to in part to the energy offsets realized by IERCF's solar power generation system and by sales of the Soilpro premium compost. In addition, the facility's proximity to the wastewater treatment plants where the biosolids are generated helps keep cost associated with transporting the biosolids to a minimum.

IERCF's rooftop solar power generating facility is capable of generating approximately 1-megawatt of clean, renewable power, which represents about 50% of IERCF's energy demand. The success of IERCF's solar power generating system has prompted IERCF management to investigate the feasibility of installing one or more wind turbine power plants to generate additional clean, renewable power. IERCF's neighbor, the IEUA Regional Water Recycling Plant No. 4 has taken the lead on this initiative and is currently in the pre-design phase of a 1-megawatt wind turbine power plant installation. If successful, IERCF will pursue a similar installation, which would help the facility realize additional power savings and further offset its processing costs. It is the long-term goal of the IERCA to install renewable energy technologies such that all operations are removed from the grid by 2020. Wind and solar power are expected to play a significant role in that process.

In 2010, IERCF sold all compost produced totaling nearly approximately 240,000 cubic yards of Soilpro premium compost with revenues of approximately $650,000. These sales were realized due to IERCF's ability to provide a year-round supply of consistent quality, U.S Composting Council's Seal of Testing Assurance (STA) certified compost with a guaranteed nutrient analysis. Due to ongoing efforts by IERCF's sales staff in developing an ever-expanding market for compost, Soilpro compost is currently sold to over sixty (60) commercial customers who each purchase anywhere between 20 and 130,000 tons of Soilpro compost annually. Demand for the high-quality product has ensured that all of the compost produced is sold, which allows the facility to maintain its throughput goals and offset its operating costs. At this time, Soilpro compost is sold to a varied customer list that includes commercial soil amendment suppliers and landscapers.

5. UTILIZATION OF EQUIPMENT/SYSTEMS AND TECHNOLOGIES

IERCF utilizes Aerated Static Pile (ASP) composting technology to efficiently convert biosolids and greenwaste feedstock into a premium-quality finished compost product. This technology is ideally suited for IERCF because it requires less area, less material handling, and produces finished compost quicker than traditional windrow composting operations. At IERCF, the ASP system draws process air down and through the piles of composting material (i.e. negatively aerated static piles) using 22 computer controlled blowers (one for each compost pile). Sufficient air is supplied to the pile to encourage
the growth of naturally occurring microbes that degrade the material, eventually transforming it into compost in approximately 21 days. The ASP system uses a grid-work of vents, located in the floor under the composting piles, to ensure that the process air is drawn evenly throughout each pile. The blower exhaust is ducted to IERCF’s biofilter for odor and emissions control. IERCF’s computerized Supervisory Control and Data Acquisition system (SCADA) monitors/controls numerous activities throughout the facility. The SCADA system tracks all ASP composting parameters including process airflow and material temperatures while recording the necessary parameters to provide quality assurance and the documentation required to satisfy all the state and federal composting regulations.

The SCADA system enables efficient facility operations as operators can remotely monitor operations and operate the aeration equipment. This system is facilitated by a network of wireless receivers, located throughout IERCF, which allows authorized personnel remote access to SCADA controls. In addition to the ASP process, SCADA also manages other IERCF activities including:

- Feeding and mixing equipment
- Conveyance system
- Screening system
- Ventilation equipment
- Pumps
- Temperature control equipment
- Compliance tracking and report generation

In order to minimize the use of heavy equipment (e.g., loaders, etc.) within the facility and achieve the maximum in material conveyance efficiency, IERCF utilizes stationary belt conveyors to the greatest extent possible. Currently, IERCF’s conveyors move incoming feedstock from the receiving hoppers to the facility’s pugmill for mixing and then into the active composting area. Conveyors are also used to convey cured compost material to the screening area where trommel screens are used to size the cured compost into finished Soilpro compost. Originally, the IERCF conveyor system was designed to move material from the active compost area to the screening area and then to the curing area. IERCF operated this way during startup before difficulty in screening material from the active compost area, which has relatively high moisture content, caused IERCF staff to modify the sequence. Currently, material is moved from the active compost area to the curing area before it is conveyed to the screening area for sizing. A facility improvement project, currently in progress, will modify the existing conveyor network by adding additional conveyors to accommodate this change in the process flow. When the improvement project is completed, conveyors will once again move materials throughout the facility and eliminate the need for loaders to move materials from one process area to another.

In addition to the conveyor system, IERCF utilizes a variety of equipment to keep the facility operating at peak efficiency. A partial list of equipment utilized at IERCF is provided below:

- Custom-built biosolids and amendment hoppers
- Westec belt conveyors
- McClanahan pugmill mixers
- Fan Engineers of America ventilation equipment
- Wildcat trommel screens
- John Deere wheel loaders
- Caterpillar back-up power gene

IERCF’s roof mounted solar power generation system utilizes over 6,000 solar panels with the combined capability of generating up to 1-megawatt of clean, renewable power. This solar power-generating system provides up to one half of the total power needs of IERCF and in doing so helps offset the facility’s processing costs.
A soon to be completed 2-megawatt emergency power generator installation will ensure that IERCF can maintain operations in the event of a power outage. IERCF currently shares the use of its neighbor’s (IEUA Regional Water Recycling Plant No. 4 (RP-4)) emergency power generator but expansion of RP-4’s treatment capacity prompted the need for IERCF to have its own stand-alone emergency generator system.

6. HEALTH AND SAFETY

One of the most unique challenges of operating a composting operation within an enclosed facility is maintaining a safe work environment for staff working within the facility. Traditional composting operations are outdoors and vent emissions to the atmosphere when organics are decomposing. Having these emissions contained within a building before venting them to the biofilter for treatment requires a high level of monitoring to ensure that staff is operating in a safe environment. Worker safety and health was proactively planned and engineered into the facility and it was designed to incorporate aggressive air changes keeping the building air quality at acceptable levels. A health and safety team was formed to conduct periodic tests to both verify safety assumptions as well as dictate necessary personal protective equipment as needed. An assessment has been conducted during every throughput increase as well as being scheduled annually and there have been no major safety issues of concern at the IERCF to date. A certified health and safety analyst is on site ensuring that safety codes and operational safety procedures are followed. Staff has logged over 1,000 hours of safety training and maintains an outstanding safety record at IERCF. In addition to specific safety training, key IERCF staff earned Master Compost Certificates through the University of California Extension at Riverside California. IERCF is also equipped with the latest in onsite safety equipment/appliances including emergency lighting, fire suppression system, eyewash stations, vehicle warning lights and horns, high visibility safety vests, eyewear, etc. In addition, IERCF’s emergency power generator operates automatically during power outages, which ensures that a safe working environment is always maintained within the facility.

Although worker safety is paramount, product safety is also a key concern so every effort is made to ensure that Soilpro compost is safe for public use. IERCF focuses on producing top quality compost under the guidelines outlined in the United States Composting Council’s Seal of Testing Assurance (STA) Program. IERCF’s quality control procedures, known as HACCP (Hazard Analysis and Critical Control Point) are tailored after the U.S. Army’s Natick Laboratories and the National Academy of Sciences research on food safety for astronauts. IERCF’s quality assurance program guarantees Soilpro compost to be a consistent, stable, and safe product. The program includes periodic testing during and after the compost process.
tracking parameters such as: moisture content; carbon to nitrogen ratios; process temperatures; and pathogen destruction to verify that key process targets are consistently met. In addition, all testing required by federal and state regulations is conducted and documented to ensure complete compliance. Process and documentation procedures are verified by inspectors on a regular basis and all of these verification procedures have resulted in IERCF having a perfect compliance record to date.

7. PUBLIC ACCEPTANCE, APPEARANCE AND AESTHETICS

The public’s acceptance of IERCF was a key concern from its inception through the planning, design, construction and ongoing operation of IERCF. Siting IERCF in an industrial location away from residential communities helped in gaining the public’s initial acceptance of the project. The aesthetics of the facility were enhanced during the design phase by giving careful attention to the site layout (i.e. building orientation, access road layout, biofilter location, etc); building appearance; and landscape design. The design focused on minimizing impacts to the surrounding community and enhancing the overall appearance of IERCF’s industrial site. During construction, public acceptance was fostered by mitigating construction impacts such as noise, dust, and traffic. Now with IERCF in full operation, a program has been implemented that continues to develop public acceptance of IERCF by:

- Mitigating any/all facility impacts
- Promoting the benefits/use of compost, and
- Ensuring the quality of Soilpro premium compost.

MITIGATING FACILITY IMPACTS:

Operating a facility the processes over 150,000 tons of biosolids per year requires operational procedures/restrictions that are aimed at protecting and enhancing the public's acceptance of the facility. For example, trucks arriving with biosolids/amendment and trucks departing with Soilpro compost are required to be in good working order and with loads completely covered. Processing at the facility scales is done quickly and efficiently to avoid truck queuing and traffic on or offsite. All truck loading and offloading is done within the enclosed facility and only after the quick-acting access doors have been fully closed. Truckers are required to wash out their trailers (at the facility’s dedicated truck wash area) before leaving the IERCF property, and all deliveries to or from the site are made during normal business hours. Odors are controlled by maintaining the facility under negative pressure and by venting all facility/process air through the biofilter for treatment. The site grounds are well maintained with clean access roads, liter control, landscape maintenance and building maintenance (e.g., window cleaning, painting, etc.). The concept for IERCF was to develop a co-composting facility that blended in seamlessly with its surroundings and that concept was achieved and is now rigorously maintained in order to protect and enhance the public’s acceptance of IERCF.

PROMOTING THE BENEFITS OF COMPOST:

The public’s acceptance of IERCF was also gained by helping the public gain a better understanding of the benefits of compost and, in particular, Soilpro premium compost. IERCF has developed and continues to support an excellent community outreach program. Improving public acceptance of compost as a valuable, renewable resource is done through educational activities that explain compost topics such as: the benefits of compost; IERCF’s state of the art composting process; composting regulatory requirements; and the U.S Composting Council’s Seal of Testing Assurance (STA). Many activities are geared to the local resident by providing specific information and instruction on compost use for lawns, flowerbeds, trees and shrubs. IERCF staff also participates
each year in the International Compost Awareness Week (ICAW) providing Soilpro compost use seminars, instructional literature, and free bags of Soilpro compost to the public. In 2010, IERCF staff gave away over 1,000 bags of Soilpro compost during ICAW. IERCF also provides Soilpro compost to local community garden projects, churches, and charitable organizations on an ongoing and regular basis.

ENSURING THE QUALITY OF SOILPRO COMPOST:

The quality of Soilpro compost is ensured by rigorous process controls and monitoring during the composting process. IERCA utilizes the aerated static pile composting process, which includes a thorough monitoring program to produce a top quality finished compost. The finished compost is tested to ensure that the compost meets the state and federal regulations as well as the U.S. Composting Council’s Seal of Test Assurance (STA) program requirements. The compost is further subject to a comprehensive nutrient analysis that quantifies the levels of nutrients in the finished compost. Before IERCF compost is sold under the Soilpro brand, test results confirm that minimum product standards are maintained.

IERCF’s marketing program promotes the quality and consistency of Soilpro compost and backs up the claim with an outstanding product. Public acceptance of Soilpro compost has continued to grow, consequently, demand for the product has resulted in annual revenues of approximately $650,000.