OPERATING PLAN

Introduction

This operating plan addresses procedures for facility operations at the Peoria City/County Landfill No. 3 (Landfill No. 3) and for maintenance and monitoring of the engineered systems at the facility.

The operating plan is based on the applicable landfill requirements contained in 35 Ill. Admin. Code, Part 811, and the federal landfill regulations. Landfill employees will be trained on the landfill's operating procedures, and landfill management will be responsible for assuring that employees comply with the plan. A copy of the operating plan will be maintained at the landfill office for reference by landfill management and employees to ensure proper management of landfill operations.

Personnel Requirements and Training

Landfill employees will be trained on operating procedures and safety practices prior to performing any unsupervised work and on a regular basis thereafter. The specific areas of training for an employee will vary depending on the responsibilities of their job category. Personnel will be proficient in the following areas necessary for safe operation of the facility.

- Safety procedures;
- Emergency procedures;
- Fire control;
- Load checking requirements;
- Operating procedures;
- Truck queuing;
- Mechanical tipping;
- Unloading;
- Scalehouse and scale procedures;
- Vector, litter, and dust control;
- Equipment operation and maintenance; and
- Construction techniques.

An outline of the training program is provided in Appendix R.
Worker protection and safety will be further assured by complying with the standards and guidelines of the federal Occupational Safety and Health Administration's (OSHA) worker safety regulations.

Supervision and daily operations at the expanded Peoria City/County Landfill No. 3 will be performed by the personnel identified below. Staffing levels will vary depending on incoming waste volumes, season, and the level of construction activity during a given period. It is anticipated that, at a minimum, one person will be employed for each position identified. There will be some overlap and cross-training in the duties of each position to account for vacation/sick periods and changes in employment. Either the Vice President of the Landfills or the Facility Manager will be certified in Illinois as a Certified Landfill Operator, with all necessary endorsements.

Vice President of Landfills

The Vice President of Landfills has overall responsibility for development and operation of the facility. The Vice President of Landfills will supervise the Facility Manager activities to assure that they are performed in accordance with the Operating Plan. Along with corporate compliance staff, the Vice President of Landfills verifies all incoming waste is handled properly, that all routine tasks necessary for proper operation of the landfill are performed, and that sufficient equipment is available.

Facility Manager

The Facility Manager is responsible for the day-to-day operations of the facility. This includes supervising facility personnel, directing equipment and facility maintenance activities, and ensuring that the facility is operated and maintained in accordance with the permit. All landfill personnel will receive direction from the Facility Manager.

Gate Control Administrators

The Gate Control Administrators operate the facility scales, maintains scale tickets, provides traffic control and performs tarp and load inspections. The Gate Control Administrators will also perform office-related activities including administrative tasks. The Gate Control Administrators will be stationed at the scalehouse during operating hours to process and record all entering waste vehicles and scale transactions, and to inform vehicle drivers of the location of the active face.

Equipment Operators

Equipment operators will be employed to construct, operate, and maintain the facility. Equipment Operators will be utilized as necessary depending on the season, volume of incoming waste, and level of construction activity. Adequate personnel will be made available to properly meet the needs of the site. The Equipment Operators will also be responsible for daily maintenance and minor repairs of all landfill equipment in accordance with the equipment manufacturer's recommended maintenance program.

Certain activities such as major earth moving, cell construction and final cover construction may be performed by qualified contractors.
General Laborers

A sufficient number of general laborers will be employed to support construction and operating activities. Part-time or full-time employees will be provided as necessary for tasks such as litter control and general maintenance.

Equipment

The equipment required for construction and operation of the landfill will vary depending on the level of construction activity, season, and incoming waste volumes. The required equipment will be purchased or leased and will be maintained on-site throughout the operational life of the landfill.

While equipment needs and availability may change, typical equipment that may be utilized at the facility includes the following:

- Water Wagon
- Backhoe Loader (e.g. Caterpillar 420)
- Grader (e.g. Caterpillar 140-G)
- Excavator (e.g. Caterpillar 365)
- Compactor (e.g. Caterpillar 836)
- Bulldozers (e.g. Caterpillar D6 and D8)
- Sweeper

Utilities

The following utilities will be maintained at the facility:

- Electrical service to PCCLI's maintenance building, scalehouse, and environmental control systems as needed;
- Phone service to PCCLI's maintenance building, scalehouse, and Landfill Manager's pick-up truck;
- Water supply to all facility buildings requiring an extended employee presence; and
- Sanitary service to scalehouse and maintenance building.

Utilities will be provided and maintained at the site at all times during the operating period of the landfill for safety and compliance with the requirements of 35 Ill. Admin. Code, Part 811.
Operation Controls

The following restrictions and guidelines will be implemented at the site to maintain security, safety, and cleanliness. Specifically, these restrictions and guidelines will apply to the following:

Operating Hours

The facility will operate between 7:00 a.m. and 5:30 p.m., Monday through Saturday. The facility will typically remain closed on Sundays and on the following holidays/dates: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. With 24-hour notice to the County, the hours of operation may be modified, within permit limitations, to accommodate user needs or respond to emergency conditions.

Facility operations, including application of daily cover, maintenance, etc. may occur until no later than 8:00 p.m. except under extreme conditions. Landfill construction activities, such as the development of a new cell, may occur any time as needed to ensure uninterrupted solid waste disposal service.

Operating Life

Landfill No. 3 has been designed to provide additional disposal capacity to the proposed service area for approximately 32 years and will provide approximately 10.1 million tons of capacity. The estimated operating life of the landfill may vary due to changes in incoming waste volumes, waste compaction rates, and the types of daily cover materials used.

Access Controls

Access to the facility will be limited to the southeast entrance, which is located off of Cottonwood Road. Facility personnel will direct landfill customers, vendors, and visitors to the appropriate areas during operating hours. Unauthorized access to the active face and other areas within the facility boundary will be prevented at all times. A restricted secondary access entrance from Cottonwood Road is also available to the south of Landfill No. 1. This entrance may be used during site construction activities. Access gates will be closed and locked during non-operating hours.

☐ Name of the Facility

☐ A permanent sign will be posted in a conspicuous location near the facility's main entrance with the following information:

☐ A statement that disposal of hazardous waste is prohibited;

☐ A statement that Special Wastes must be permitted by the IEPA and must be accompanied by a manifest;

☐ The facility permit number issued by the IEPA Bureau of Land;

☐ The facility hours of operation:
The prohibition of unauthorized dumping and trespassing;

A telephone number to call in case of an emergency;

The name, address and telephone number of the Landfill Operator; and

A statement that no trespassing or hunting is allowed.

**Litter Control Plan**

A number of operating procedures will be employed at the Peoria City/County Landfill to minimize and control litter. Incoming refuse vehicles will be required to be fully-enclosed or to have covers or tarps to prevent waste from blowing out of the vehicles. The active disposal area will be kept as small as possible (while still allowing safe operation), and will be covered at the end of each day with daily cover materials that include soil, synthetic covers, and IEPA-approved alternate daily cover materials.

During periods of high winds, the operator will modify daily activity to minimize wind disturbance. For example, lower elevation lifts can be used to shield the operation against high winds. Temporary portable fencing may also be used as additional protection against blowing litter. Examples of various temporary fencing products are provided in Appendix R. In the event of an uncontrollable wind disturbance, the facility may shut down until the high winds subside.

Laborers will patrol the facility and surrounding property to collect any litter escaping the active fill area, including litter caught by the portable and perimeter fencing. The collected litter will either be placed directly into the landfill and covered, or placed into a secure covered container for subsequent disposal.

**Mud Tracking Control**

The perimeter interior roadways near the active face will have either a paved or an aggregate surface to help control mud tracking. A street sweeper or other methods will be used to remove mud from the paved roads. If necessary, drivers will be required to stop their vehicles and remove excess mud from their vehicle tires prior to exiting the facility. Vehicles leaving the active disposal area will travel at least 1,740 feet on hard-surfaced roads prior to exiting the facility via the main entrance road. This distance of travel prior to entering the public road will prevent the tracking of mud onto public roads. Peoria City/County Landfill Inc. (PCCLI), will monitor the access road and nearby public road for mud tracking each operating day and will take corrective actions as required.
Air Quality Plan

The facility will be operated in a manner that minimizes the impact to air quality by:

- Prohibiting open burning of waste;
- Operating the planned landfill gas control system in accordance with appropriate permit conditions and regulations;
- Implementing an effective dust control program to minimize dust emissions and migration; and
- Monitoring in accordance with the facility’s air permit.

Dust Control Plan

Dust originating from unpaved access roads will be controlled by periodic watering of the roads, using water obtained from the stormwater detention basin areas, existing lakes, or water supply well. Areas of final cover will be vegetated as soon as practical.

Noise Control Plan

The facility will be operated in accordance with 35 Ill. Admin. Code Section 900. All machinery designated for operations at the landfill will be equipped with mufflers or other sound dissipative devices as required for compliance with 35 Ill. Admin. Code, Sections 901.101 through 901.103 and Section 901.121. Extensive buffer areas will be used at the landfill to isolate waste disposal operations from neighboring properties and to minimize noise levels at the facility’s boundaries.

Odor Control Plan

Landfill No. 3 will implement a comprehensive Odor Control Plan to control and mitigate odors that may emanate from the landfill during periods of site work and repair, thereby preventing odors from leaving the landfill site. In addition, PCCLI may implement various operating controls to control odors, including:

- Spreading and compaction of waste immediately after it is unloaded at the active face;
- Application of 6-inches of soil cover or other suitable cover material at the end of each work day;
- Routine load checking for unauthorized wastes and odorous wastes;
- Immediate application of suitable cover material for any loads exhibiting strong odors following compaction in the landfill;
- Limiting the working face of the active area of the landfill so that it is not larger than necessary, based on terrain and equipment, to conduct operations in a safe and efficient manner;
☐ Installation of an active gas collection system;

☐ Installation and operation of an interim gas collection system, as necessary, prior to final capping;

☐ Implementation of a landfill gas air monitoring program that will include routine ambient air monitoring; and

☐ Application of appropriate odor control products to neutralize any difficult odors that cannot be controlled using the above outlined measures.

The Odor Control Plan is included in Appendix R.

_Bird Control Plan_

Bird populations will be controlled at the Peoria City/County Landfill No. 3 through the use of proper landfill operational practices and bird deterrent measures. PCCLI has also developed a Bird Management Plan to be used at the facility which has been successfully implemented at other facilities. A copy of the Bird Management Plan is provided in Appendix R.

_Vector Control Plan_

Vectors (e.g., rodents, insects) that have been associated with landfills in the past are typically not a problem at a modern, properly operated facility such as Landfill No. 3. Daily cover, including soil and permitted alternate daily cover materials, are used to provide a physical barrier and to prevent vectors from accessing the buried waste for nesting places or food sources. Maintaining positive drainage will minimize breeding habitats for insects. Additional control measures, such as the use of a professional exterminator, will be implemented as necessary.

_Open Burning_

Open burning of municipal solid waste will be prohibited at Landfill No. 3 site. The only burning activity that may occur on-site is the flaring of landfill gas and burning of vegetation cleared from the property in accordance with IEPA regulations. It is anticipated that a landfill gas flare (or flares) will be incorporated into the landfill’s gas management system. All applicable state and federal permits will be obtained prior to the installation and operation of the flare(s). Additionally, the flaring system(s) will operate in compliance with the permitting requirements, emissions standards and air quality standards contained in 35 Ill. Admin. Code Subtitle B: Air Pollution Regulations. All open burning of cleared vegetation will be conducted in conformance with 35 Ill. Admin. Code Part 237.

_Salvaging_

Salvaging may only be performed by PCCLI. PCCLI will perform its salvaging activities in compliance with 35 Ill. Admin Code, Section 811.108.
Transportation Plan

The landfill’s main entrance and exit is located on the north side of West Cottonwood Road, approximately 0.2 miles west of Murphy Road and 0.85 miles southwest of Illinois Route 8. The secondary, secured-access entrance is located approximately 0.75 miles west of the current entrance and is only intended to be used by landfill employees or approved equipment operators/laborers during construction activities.

The entrance road between Cottonwood Road and the scalehouse is approximately 1,740 feet long and has an asphalt surface. The entrance road is approximately 27 wide and has gravel shoulders, allowing meeting vehicles to safely pass. The entrance road has a speed limit of 25 mph.

Waste Acceptance Procedures

Waste will be inspected to verify that it is an authorized waste that is acceptable for disposal in the Landfill No. 3. Accurate and up to date records will be maintained on-site for all wastes received and accepted at the landfill.

Type of Waste Accepted for Disposal

Waste materials accepted for disposal will consist only of general municipal refuse, construction and demolition debris, certified non-special waste, non-hazardous special wastes and non-hazardous liquids for solidification. A comprehensive load checking program will be implemented to detect and eliminate the attempted disposal of any unauthorized wastes. A detailed description of the load checking program is provided in a subsequent section of this Operating Plan. The applicant will not request, seek, apply for, or accept a chemical waste landfill approval for Landfill No. 3 from the United States Environmental Protection Agency. The Owner has the right to further restrict certain special and non-special wastes from acceptance at their discretion.

The following is a list of wastes that will NOT be accepted from commercial or industrial customers for landfill disposal at Landfill No. 3.

- Hazardous Waste, as defined in accordance with 35 Ill. Admin. Code 721.103;
- Any Delisted K061 waste;
- Electronic wastes, as defined in accordance with Public Act 095-0959, Electronic Products Recycling and Reuse Act (bans disposal of TVs, computers, monitors and printers from all sources as of 1/1/2012);
- Flammable wastes;
- PCB containing waste prohibited from disposal at a RCRA Subtitle D landfill by 40 CFR 781;
☐ Potentially Infectious Medical Wastes as defined in accordance with 35 Ill. Admin. Code 1420.102;

☐ Universal Waste Batteries as defined and restricted in accordance with 35 Ill. Admin. Code 733.102;

☐ Universal Waste Pesticides as defined and restricted in accordance with 35 Ill. Admin. Code 733.103

☐ Universal Waste Thermostats as defined and restricted in accordance with 35 Ill. Admin. Code 733.104;

☐ Universal Waste Lamps as defined and restricted in accordance with 35 Ill. Admin. Code 733.105;

☐ Universal Waste Mercury-Containing Equipment as defined and restricted in accordance with 35 Ill. Admin. Code 733.106;

☐ Landscape Waste in accordance with Section 22.22 of the Illinois Environmental Protection Act;

☐ Whole Tires, in accordance with Section 55 of the Illinois Environmental Protection Act, and 35 Ill. Admin. Code 848;

☐ White Goods in accordance with Section 22.28 of the Illinois Environmental Protection Act;

☐ Grease Trap Sludge in accordance with Section 22.30 of the Illinois Environmental Protection Act; and

☐ Used Motor Oil in accordance with Section 21.6 of the Illinois Environmental Protection Act, and 35 Ill. Admin. Code 739.

RCRA-empty drums will only be accepted as long as they are either intact with one end open, or crushed with both ends open. Drums containing waste will only be accepted in bulk shipment containers with all drums open and available for inspection.

This list of unauthorized wastes may change as the result of future legislation. The Facility Manager and operations personnel will be made aware of any modifications to waste classifications that result from such legislation.

Weighing and Control of Waste Volumes

The facility will maintain accurate and up to date records of wastes that are accepted for disposal. A scale will be provided at the entrance to the facility so that trucks may be weighed. The scale will be certified on a regular basis, and proof of certification will be maintained on-site. Daily records of the total tons of municipal solid waste and nonhazardous special waste delivered to the facility will be kept on file at the landfill site for inspection by the IEPA.
Recordkeeping

The landfill operator will maintain an accurate record of operations at the facility for compliance with local, state, and federal requirements. At a minimum, the following information will be maintained at the landfill or an alternative location specified to the IEPA:

- All information submitted to the Agency pursuant to 35 Ill. Admin. Code, Parts 812 and 813;
- Records of daily, weekly, monthly, and annual waste receipts;
- Records of nonhazardous special waste acceptance;
- Annual facility report (per 35 Ill. Admin. Code, Section 813.501);
- Documentation of compliance with location standards;
- Load checking records, training procedures and notification procedures;
- Construction acceptance reports;
- Leachate disposal information;
- Leachate recirculation quantities;
- Any demonstration, certification, monitoring results, testing, analytical data, or remediation plans pertaining to the groundwater, leachate and landfill gas monitoring programs;
- Maintenance information pertaining to landfill equipment, facilities, survey inspections and repairs;
- Closure and post-closure care plan and any monitoring, testing, or analytical data required by 35 Ill. Admin. Code, Parts 811 or 812;
- Cost estimates and financial assurance documentation required by 35 Ill. Admin. Code, Part 811, Subpart G; and
- Log of all complaints received concerning litter, mud tracking, dust, noise, odor, or vectors.

The above records will be submitted to the IEPA as required. The facility's annual report will be submitted to the IEPA each year during the landfill's operating life and post-closure monitoring period.

Nonhazardous Special Wastes

Nonhazardous special wastes are defined as industrial process wastes or pollution control wastes that have been determined to be nonhazardous pursuant to Section 3001 of the Resource Conservation and Recovery Act of 1976 (42 USC 6901 ET. SEQ.) and pursuant to the Illinois Pollution Control Board regulations.
Landfill No. 3 will only accept nonhazardous special wastes that have been authorized for land disposal by the IEPA Permit. The Vice President of Landfills may impose additional requirements for the transportation, disposal and handling of special wastes to ensure protection to the environment, facility employees, and the landfill facility. The Owner may restrict the disposal of IEPA-approved non-hazardous special wastes that may be accepted, at their discretion. Procedures for managing nonhazardous special waste and maintaining related records are outlined below.

Facility Sign

A prominent sign will be maintained at the entrance to the landfill stating that disposal of hazardous waste is prohibited. The sign will also state that special waste will be accepted only if accompanied by an identification record and a manifest (unless the waste is exempt from manifest requirements).

Special Waste Manifests

All special wastes accepted for disposal (excluding special wastes generated by the Facility Operator at the site) shall be accompanied by a manifest. Manifests shall include the following information at a minimum:

- The name of the special waste generator;
- When and where the special waste was generated;
- The name of the special waste hauler;
- The name of the solid waste management unit (Peoria City/County Landfill No. 3);
- The date of delivery to the landfill;
- The name, special waste stream permit number, and quantity of special waste delivered;
- The signature of the person who delivered the special waste to the hauler, acknowledging such delivery;
- The signature of the special waste hauler, acknowledging receipt of the special wastes; and
- The signature of the person who accepted the special waste at the landfill, acknowledging acceptance of the special waste.

The Peoria City/County Landfill will be designated on the manifests as the final destination point. Any subsequent delivery of the special waste or any portion or product thereof to a special waste hauler will be conducted under a manifest initiated by Peoria City/County Landfill.
All special waste transporters must present four (three plus the original) copies of the manifest. The transporter will retain one copy, and PCCLI will:

- Retain the original;
- Send one copy of the completed transportation record to the person who delivered the special waste to the special waste transporter (usually the generator, or another special waste management facility);
- Send one copy of each signed manifest to the IEPA in accordance with the requirements of 35 Ill. Adm. Code Part 809; and
- Send information on rejected loads to the IEPA in a quarterly report, as required by 35 IAC 809.

PCCLI will retain the records of special waste transactions for a minimum period of three years. Completed manifests will be made available to the IEPA at reasonable times for inspection and photocopying pursuant to Section 4(d) of the Illinois Environmental Protection Act.

**Profile Identification Record**

Generators of special waste (including special wastes generated by the Facility Operator at the site) must obtain the Owner’s approval of the waste prior to transporting the waste to the facility. Only in the event that the waste profile has been approved as an acceptable waste for disposal will the waste be accepted.

The first step in special waste acceptance consists of the generator providing to the Operator a special waste profile identification sheet. The special waste profile identification sheet shall be supplied by the generator and certify the following:

- The generator’s name and address;
- The transporter’s name and telephone number;
- The name of the waste;
- The process generating the waste;
- Physical characteristics of the waste (e.g. color, odor, solid or liquid, and flashpoint);
- The chemical composition of the waste;
- The metals content of the waste;
- Absence of hazardous characteristics, including identification of wastes deemed hazardous by the USEPA or the IEPA;
- Absence of PCB and dioxin containing wastes prohibited from disposal at a RCRA Subtitle D landfill by 40 CFR 761; and
☐ Any other information, such as the results of tests performed in accordance with 35 IAC 811.202, that can be used to determine whether 1) the special waste is regulated as a hazardous waste as defined by 35 IAC 721, 2) the special waste is of a type that is permitted for, or has been classified in accordance with 35 IAC 809, for disposal at the facility, and 3) whether the method of disposal at the facility is appropriate for the waste.

Each subsequent shipment of a special waste from the same generator must be accompanied by a special waste manifest, a copy of the original special waste profile identification sheet, and either of the following:

☐ A special waste recertification by the generator describing whether there have been changes in the following: laboratory analysis (copies to be attached), raw material in the waste-generating process, the waste-generating process itself, the physical or hazardous characteristics of the waste, and new information on the human health effects of exposure to the waste; or

☐ Certification indicating that any change in the physical or hazardous characteristic of the waste is not sufficient to require a new special waste profile.

Waste Analysis Plan

Except for special wastes for which the facility has a generic permit or alternative allowance, a representative sample of each special waste stream must, at a minimum, be analyzed for the following parameters:

☐ Paint filter;
☐ Flashpoint;
☐ Reactive sulfide;
☐ Reactive cyanide;
☐ Total phenols;
☐ pH; and

☐ The organic and inorganic Toxicity Characteristic Constituents listed in 35 IAC 721.124 by the Toxicity Characteristics Leaching Procedure (TCLP).

The following exceptions apply to the above analytical requirements:

☐ Total sulfide analysis may be substituted for reactive sulfide, only if the total sulfide concentration does not exceed 10 parts per million (ppm);

☐ Total cyanide analysis may be substituted for reactive cyanide, only if the total cyanide concentration does not exceed 10 parts per million (ppm);
Total concentration analyses may be substituted for TCLP analyses except where the total concentrations exceed the TCLP limits specified in 35 IAC 721.124;

Analysis of the eight pesticide Toxicity Characteristic Constituents (D012, D013, D014, D015, D016, D017, D020, and D031) can be waived if the Generator certifies that they are not expected in the waste based on the nature of the waste and generator's business;

Petroleum-contaminated media and debris from Leaking Underground Storage Tank (LUST) sites subject to corrective action under 35 IAC Parts 731 and 732 are only required to be analyzed for flash point, paint filter test, and TCLP lead;

An MSDS for off-specification, unused or discarded commercial or chemical products may be used to determine the presence of hazardous constituents in lieu of analytical results; and

Complete TCLP analysis is not required in the case of an emergency cleanup provided: 1) the IEPA Emergency Response Unit (ERU) authorizes the waste stream analytical exemption, 2) the Operator obtains assurance that the Generator has received an incident number from the Illinois Emergency Management Agency, and 3) the waste was analyzed for the chemical constituents required by the IEPA ERU.

Special waste streams that originally required analysis will be reanalyzed at least once every 5 years and whenever the composition of the waste changes. Test methods employed for detailed analysis to characterize and to identify waste are provided in the following reference materials:

- EPA-600/4-79-020: "Methods for Chemical Analysis of Water and Wastes",
- SW-846: "Test Procedures for Evaluating Solid Waste, Physical/Chemical Methods", and

Acceptance Criteria

Special waste shall meet the following criteria prior to acceptance:

- Does not contain any Delisted K061 waste;
- Does not contain a listed hazardous waste;
- Does not contain PCBs at concentrations greater than 50 ppm, except as specifically allowed by RCRA and/or TSCA regulations for disposal at a RCRA Subtitle D landfill;
- Does not exhibit the characteristics of ignitability, reactivity, corrosivity, or toxicity as defined by 35 IAC 721 Subpart C;
☐ Does not contain total phenol concentrations greater than 1,000 parts per million, unless specific information demonstrates that the material is not a threat to human health or the environment;

☐ Does not contain reactive cyanide concentrations greater than 250 parts per million unless specific information to show it does not present danger to human health or the environment is provided. Wastes with between 10 and 250 parts per million reactive cyanide can only be accepted if the Generator provides a signed certification that none of the following have occurred:

- The waste has never caused injury to a worker because of HCN generation
- That the OSHA work place air concentration limits of HCN have not been exceeded in areas where the waste is generated, stored, or otherwise handled; and
- That air concentrations of HCN above 10 parts per million have not been encountered in areas where the waste is generated, stored, or otherwise handled.

☐ Does not contain reactive sulfide concentrations greater than 500 parts per million unless specific information to show it does not present danger to human health or the environment is provided. Wastes with between 10 and 500 parts per million reactive sulfide can only be accepted if the Generator provides a signed certification that none of the following have occurred:

- The waste has never caused injury to a worker because of H_2S generation;
- That the OSHA work place air concentration limits of H_2S have not been exceeded in areas where the waste is generated, stored, or otherwise handled; and
- That air concentrations of H_2S above 10 parts per million have not been encountered in areas where the waste is generated, stored, or otherwise handled.

RCRA Empty Containers

RCRA empty containers received as a special waste shall meet the following criteria:

☐ Have a rated capacity less than 110 gallons;

☐ Meet the definition of empty as provided in 35 IAC 721.107(b); and

☐ For drums, at least one end must be removed and the drums must be intact, or both ends must be removed and the drums must be crushed flat prior to disposal.

Where possible, a copy of the material safety data sheet for products last contained in the drum shall be obtained and kept on file. Containers that formerly held "P"-listed hazardous
wastes or TSCA regulated quantities of PCBs must be triple rinsed. Compressed gas cylinders will not be accepted unless fully de-headed.

**Special Waste Recordkeeping**

The Operator will retain copies of all special waste profile identification sheets, special waste recertifications, certitifcations of representative samples, special waste laboratory analyses, special waste analysis plans, and any waivers of requirements (prohibitions, special waste management authorization, and operating requirements) at the facility or other location acceptable to the IEPA until the end of the post-closure care period.

**Waste Solidification**

Liquids will not be disposed at Landfill No. 3 except as described below:

- Bulk or noncontainerized liquid waste will not be placed in the Peoria City/County Landfill No. 3, unless one of the following conditions is true:
  - The waste is household waste other than septic waste; or
  - The waste is leachate or gas condensate derived from the Peoria City/County Landfill No. 3.

- Containers holding liquid waste will not be placed in the Peoria City/County Landfill No. 3, unless one of the following conditions is true:
  - The container is a small container similar in size to that normally found in household waste;
  - The container is designed to hold liquids for use other than storage; or
  - The waste is household waste.

Nonhazardous liquid wastes received for solidification from offsite sources are classified as special wastes and will require Owner approval prior to acceptance. The following narrative describes the procedures proposed for waste solidification. Any liquid wastes will be transported to Peoria City/County Landfill by licensed special waste haulers and will be subject to the special waste management requirements described below.

Wastes to be solidified will be transported to a designated solidification area. The designated solidification area will be within an area that is developed and permitted to accept waste, unless Owner approval and IEPA permit authorize a future alternative facility. Because of the in-place environmental controls, the permitted landfill area will be suitable for use as a site to conduct waste solidification. The solidification area location will vary, but will be at least 10 feet above the landfill floor, and at least 30 feet from the landfill sidewall liner system.
Waste Solidification Containers and Methods

Wastes will be solidified in liquid-tight containers, such as steel drums or other containers suitable for this purpose. Solidification containers will be adequately spaced to allow inspections and equipment access.

Liquid wastes will be directly dumped or pumped from the waste transport trucks, into the solidification containers. Alternatively, solidification will occur in the drums in which the wastes are transported (provided adequate freeboard is available for the solidification absorbents/reagents and mixing operations). Solidification agents (reagents and/or adsorption materials) will be placed in the containers and mixed with the wastes. The amount of solidification agent will vary.

Absorbents (e.g. soil, "Oil-Dry", sawdust, and/or corn cobs) will primarily be used for the solidification process. However, depending upon waste characteristics, reagents might also be used. Reagents may include, but not be limited to lime, pozzalime, fly ash, bottom ash, or other cementitious material. Market conditions, availability, and waste characteristics will dictate which solidification agents will be used.

Absorbents and reagents will be stockpiled on site in accordance with the facility’s Storm Water Pollution Prevention Plan (SWPPP), which will specify sediment controls for the site. Reagent stockpiles will be protected from storm water run-on, and will be covered to protect the reagents from precipitation.

The waste/solidification agent mix will be allowed to cure as required. Following curing, the waste will be tested for free liquids using the paint filter test. Wastes that pass the paint filter test will be removed from the containers using appropriate equipment. Material that cannot be removed using the mechanical equipment will be manually removed using shovels. The waste will be direct-loaded into a transport vehicle for delivery to the landfill’s active face and disposed, or used as an alternative daily cover material, as detailed below.

Wastes that do not pass the paint filter test will be allowed to cure longer and/or additional solidification agent will be mixed in with the waste.

In some instances solidified waste may require additional curing time and have to remain in the solidification container beyond the day of receipt. In these instances, such waste will be covered before the end of the day and disposed during the earliest possible business day on which the solidified waste passes the paint filter test. The solidification process is not expected to result in residual waste that cannot be properly managed at the facility.

Citizens’ Convenience Center

The proposed Citizens’ Convenience Center facility will be located near the existing scale house. The convenience center will provide clearly delineated and staged drop-off areas for select wastes and recyclable materials, increasing the safety and ease of use of the facility for customers delivering materials in personal vehicles or small truck or trailer loads and prevent them from having to access the active face of the landfill with larger commercial waste trucks. In addition, the convenience center will provide the opportunity to segregate recyclable or reusable materials from the waste stream and minimize the waste disposed in the landfill.
Days and Hours of Operation

The Citizens’ Convenience Center will be operated whenever the landfill is operating and receiving waste. These hours may be extended at PCCLI’s discretion.

Types of Waste to be Received

The Citizens’ Convenience Center will receive the following materials:

- Source-separated recyclable materials, including cardboard, mixed paper, and commingled containers;
- Municipal solid waste;
- Landscape wastes;
- White goods;
- Tires;
- Pallets and clean wood; and
- Refuse.

Drop-off areas and containers will be properly signed and labeled with acceptable wastes and materials. The types of waste to be received may be modified with IEPA approval.

Traffic Patterns

Customers delivering refuse or recyclable materials to the landfill in small passenger vehicles or small trucks Trailers will be directed by the scale house attendant to the Citizens’ Convenience Center to unload their wastes. Signage and/or pavement markings will assist customers to follow the appropriate traffic route. Upon entering the convenience center, vehicles will travel in a counter-clockwise direction to unload 1) source-separated recyclables; 2) general refuse; and 3) other materials including landscape wastes, white goods, tires, pallets and clean wood. Vehicles will then proceed out of the drop-off area and exit the facility, bypassing the scale house.

Refuse and recyclable containers will be serviced by trucks approaching from a perimeter access road to minimize the risk of injury or accident and prevent any disruption to drop-off operations. To the extent possible, containers will be removed when the convenience center has closed on each operating day. If it is necessary to remove a container during the operating day, appropriate safety procedures will be followed to ensure the safety of customers and employees. Refuse will be hauled to the landfill’s active face by PCCLI, and recyclable or reusable materials will be hauled to appropriate offsite processing facilities by licensed haulers.
Refuse and Recyclables Handling Procedures

Customers delivering refuse and recyclables to the convenience center drop-off boxes will be directed to the appropriate unloading areas by pavement markings and/or signage. A separate designated area will be used for bulky items (e.g., large white goods, furniture, etc.) When containers are full (or at least once per operating day for refuse containers), they will be removed for delivery to the landfill's active face (for general refuse) or to appropriate recycling or reuse facilities (for other materials). As necessary, an empty container will be left in place of the removed container to allow operations to continue without interruption.

Load Checking Program

A comprehensive load checking program will be implemented at Landfill No. 3 to detect and eliminate attempts to dispose of unauthorized wastes at the facility. The program includes: 1) customer education; 2) employee training; 3) regular inspection checkpoints; 4) random load inspections; 5) special waste load checks, 6) record-keeping; and, 7) guidelines for handling hazardous or unauthorized wastes. The following paragraphs describe these components of the load checking program in more detail.

Customer Education

Commercial/industrial and construction and demolition haulers that utilize Landfill No. 3 will be subject to a pre-approval process. The haulers will be notified by the landfill of the types of materials that are acceptable and unacceptable for disposal. The haulers will be required to properly instruct their drivers to reject unauthorized waste materials at the curb or other point of collection.

Employee Training

All landfill employees involved with the load checking program will be familiar with the list of unauthorized wastes and load inspection procedures. Employees will be trained in the identification of unauthorized wastes, including familiarity with typical containers, markings, labels and placards that might aid in recognizing unauthorized wastes. Trained personnel will be provided with literature in this regard. Periodic personnel meetings will be held to ensure that all staff members involved with the load checking program remain aware of waste acceptance criteria, including any additions to the list of unauthorized wastes.

Regular Checkpoints

Routine load checking will be the responsibility of all employees, particularly those that work at the entrance area and those that work at or near the active fill area. Each employee will monitor vehicles entering the facility, watch for any potentially unauthorized waste, and alert management if suspect wastes are observed. For each load there will be several checkpoints (in addition to the curbside checkpoint discussed above):

- Scalehouse checkpoints. Only authorized vehicles will be allowed beyond the scalehouse. The Gate Control Administrators will refuse entry to any unauthorized vehicle or any vehicle observed to contain unauthorized waste;
☐ Active face checkpoints. Material will be observed by the equipment operators as it is discharged at the active face; and

☐ Checkpoints during compaction at the active face. Material will be inspected by the landfill compactor operator as it is compacted at the active face.

Random Inspections

Random inspections will be conducted for a minimum of three loads of waste per week or as approved by the IEPA. The Vice President of Landfills or facility manager may designate an employee to be responsible for conducting the inspections. Trucks selected for random inspection will be directed to deposit their loads in a location near the active face where the inspection can occur without interfering with the landfilling operations. Assuming no unauthorized waste materials are found during the inspection, the driver will be allowed to leave and the inspected waste material will be promptly moved to the active face for proper disposal.

Special Waste Load Checks

All loads of special waste will be checked for the presence of unacceptable materials. The special waste load checking procedures are described below:

☐ All loads stop at the scalehouse;

☐ Gate Control Administrators inspects the manifests and the load to confirm that the waste appearance is similar to that described on the Profile Identification Record, and performs fingerprint analysis consisting of conducting a pH measurement, paint filter test, radioactivity scan, and water reactivity screen. Some waste streams undergo additional, more extensive gate control testing prior to acceptance;

☐ Gate Control Administrators evaluates whether load is acceptable and conforms to the IEPA permit and facility pre-authorization;

☐ Gate Control Administrators notifies the Vice President of Landfills (or his/her delegate) if the load is suspected to be unacceptable, and obtains authorization to reject the load. The generator is notified and arrangements are made to return the load to the generator. Information regarding rejected special waste loads will be reported to the IEPA on a quarterly, or more frequent, basis; and

☐ Gate Control Administrators signs the manifest if the load is acceptable. The manifests are then distributed appropriately.

Recordkeeping

All formal load inspections and incidents involving suspect waste materials will be documented in writing by the inspector and retained by the facility for a minimum of five years. At a minimum, the following information will be logged for each formal inspection and incident that takes place:

☐ Date and time of inspection;
- Name of the hauling firm;
- Name of the driver;
- Vehicle license plate number;
- Source of the waste as reported by the driver;
- Inspector observations; and
- Signatures of inspector and driver.

Handling of Unauthorized Wastes

If any regulated unauthorized wastes are identified during the load checking programs, or are otherwise discovered to be improperly deposited at the facility, the Operator will promptly notify 1) the Illinois Environmental Protection Agency (no later than 5:00 pm the next business day after the day it is detected), 2) the person responsible for shipping the wastes to the landfill, and 3) the waste generator (if known). Waste loads that appear similar to loads suspected of containing regulated unacceptable waste will not be accepted.

The area where the unacceptable wastes have been deposited will immediately be cordoned off from public access. The unacceptable waste will be removed and transported to a properly permitted facility. The party responsible for transporting the unacceptable waste shall be held responsible for the costs of this removal, transportation and proper disposal.

Special precautionary measures will be undertaken prior to accepting subsequent waste loads from the person or source responsible for previously shipping unacceptable wastes to the landfill. Special precautionary measures may include, but not necessarily be limited to, questioning the driver regarding the waste contents and origin prior to allowing its discharge at the facility, not allowing repeat offenders and visually inspecting the waste as it is discharged at the landfill.

Survey Controls

A grid coordinate system has been established at the facility for horizontal control as shown on the facility drawings. Vertical control is based on established elevation control benchmarks. Additional survey monuments will be established by a Licensed Surveyor as appropriate to maintain onsite horizontal and vertical control.

Onsite survey control monuments will be inspected annually. Damaged monuments will be replaced by a Licensed Surveyor. Onsite survey control monuments will also be resurveyed by a Licensed Surveyor no less frequently than once every 5 years.

Record drawings of newly constructed features will be prepared at regular intervals coinciding with the preparation of construction reports. The record drawings will document the location, size, and elevation of the constructed features. The record drawings will be
included with the IEPA acceptance reports required by 35 Ill. Admin. Code, Section 811.505 (d).

Cell Development

The Facility will be developed in phases. Construction will begin in Cell 1 and progress numerically, generally east to west. Cell 1 is located in the southeast area of the landfill footprint. The landfill cell layout design and phasing are shown on the drawings.

Landfill cells will be excavated with heavy equipment contemporaneously with regular operations. Excavated material will be segregated for acceptable construction materials. PCCLI will implement stormwater controls consistent with the Facility SWPPP during each phase of construction.

Waste Placement and Compaction

Solid waste will be landfilled in tiers, each having a thickness of approximately 10 to 15 feet. Waste placement will generally occur in the lowermost tier. However, higher tiers within the landfill may be designated for waste placement during inclement weather in order to ensure operating safety and efficiency.

Solid waste will generally be placed at the toe of the active face and pushed upwards in relatively thin lifts using a compactor, bulldozer, or other appropriate heavy equipment. Heavy equipment will not be allowed to operate directly above the liner and leachate drainage and collection system until at least 5 feet of waste covers the landfill floor in order to not overstress these landfill components. Therefore, the initial lift of solid waste over the landfill floor will be pushed over the top of the active face.

The floor liner system shall be covered with at least 3 feet of solid waste or a suitable thickness of other material (soil, straw, etc.) prior to onset of sustained freezing weather in order to prevent the Earth Liner from freezing. During periods of sustained freezing temperatures, the Facility Manager shall confirm that the overlying materials provide sufficient protection against freeze-damage to the Earth Liner system. Liner systems covered by at least 3 feet of waste or protective soil may be presumptively assumed to be sufficiently protected from freeze damage. Earth Liner systems suspected of being damaged by freezing temperatures shall be further tested to demonstrate that the Earth Liner retains its specified hydraulic conductivity and/or shall be reconstructed in accordance with the specifications. Such reconstruction shall be subject to the requirements of the CQA Plan.

The first 5 feet of solid waste on the landfill floor will be visually inspected to ensure that it is free of construction and demolition debris and other debris that could damage the underlying geotextile. Alternatively, the first lift can consist of 18-inches of soil or fine-grained waste (e.g. approved materials such as dewatered sludge, contaminated soil, foundry sand, etc.). The first lift is to be carefully placed in order to prevent tears and excessive wrinkles in the geotextile.

The waste will be compacted using landfill compactors or bulldozers to minimize void space and settlement unless precluded by extreme weather conditions to meet the requirements of 35 IAC 811.105. The in-place density of the waste is expected to be approximately 1,500 pounds per cubic yard air space.
The waste will be covered with daily cover at the end of each operating day. Waste that will not be covered by an additional lift of waste or final cover within 60 days of placement will be covered with intermediate cover. Prior to placing waste over previously placed waste, the operator will remove at least a portion of the previously placed daily or intermediate cover to ensure that leachate will drain to the collection system. Waste slopes that remain longer than 60 days following placement will be no steeper than 2 horizontal to 1 vertical. Waste slopes more than 40 feet high will be sloped no steeper than 2.5 horizontal to 1 vertical.

Size and Slope of the Active Face

The size of the active face will vary and be dependent upon the amount of waste received during any particular day. The open face will be limited to that necessary to receive the waste and to ensure that the landfill will be operated in a safe and efficient manner. Based on the maximum expected daily waste receipts, the active face is not expected to exceed 10,000 square feet. At no time will the side slopes of the working face be steeper than 2 horizontal to 1 vertical.

Cover Materials and Placement

The use of daily, intermediate, and final cover layers serves to control vectors and minimize blowing litter, odor, ponding, and moisture infiltration. On-site materials will be used for cover materials.

Daily Cover

As required by 35 Ill. Admin. Code Part 811.106, a minimum of six inches of clean soil or an approved alternative daily cover (ADC) will be placed over the active face at the end of each working day, typically within 1 hour of receipt of the last load of waste. Daily cover soils will usually consist of finer grained materials (mine spoil), with an estimated hydraulic conductivity in the range of 1x10^-4 cm/sec to 1x10^-7 cm/sec.

Alternate cover materials may be used only upon demonstration to the IEPA that minimum daily cover performance standards will be met. Approved ADC, and material-specific conditions of use, are provided in Table 1. If used, alternate daily cover materials will be placed so that they provide litter control, vector control, odor control, and minimize the threat of fires, all in a manner which meets or exceeds the performance of soil daily cover.

ADC will only be used when weather conditions are conducive to its ability to prevent blowing litter, fire, odors, and access of waste materials to vectors. Any damage to the ADC will be repaired prior to continued use, or the damaged area will be covered with at least 6 inches of soil. ADC materials previously used as daily cover will not be reused for any purpose outside the waste boundaries.

A written record of ADC usage will be maintained. The record will include the date, weather conditions, ADC material used, and describe its performance. A summary of this information will be included in the facility’s annual reports.
Intermediate Cover

Intermediate cover will be placed on all areas that will not be actively filled or receive final cover for a period of 60 days or more. Intermediate cover will be sloped to provide adequate drainage and prevent ponding of water. A minimum of one foot of compacted clean soil will be placed on surfaces that require intermediate cover. The intermediate cover shall be repaired as necessary to maintain the required slopes and thickness.

Final Cover

Final cover will be placed as soon as practical after the permitted waste elevations are attained. Final cover construction will be performed in accordance with the approved drawings, specifications, and the Construction Quality Assurance (CQA) Plan.

Contemporaneous Closure and Stabilization of Waste

Landfilling will continue in each incrementally developed fill area, to the extent practical for safe and efficient operations, until the final slopes and grades are achieved. Filling activities will then move to the next area. Areas in which the final lift of waste has been placed and stability achieved will receive final cover and be vegetated. This development and sequencing plan will provide a continuum of development, operation and closure, and will allow contemporaneous closure and stabilization of the unit.

Maintenance Program

All systems and structures will be inspected and maintained on a regular basis to assure proper operation. The frequency of inspection will vary based on the system or structure being evaluated as described in the following paragraphs. Generally, landfill personnel will inspect safety equipment, fencing, gates, roads and other systems as part of their daily operating responsibilities. Landfill monitoring systems will be inspected at each sampling event. The active face will be inspected by the Facility Manager or a designated employee at the end of each operating day to ensure that daily cover has been properly applied. The final cover system will be inspected quarterly to ensure that the cover is in good condition. Inspection and maintenance activities will continued during the post-closure care period as described the approved Post-Closure Care Plan (see Appendix U). The facility inspection and maintenance plan is provided in Appendix R. The following narrative summarizes the inspection and maintenance plan.

Equipment

A rigorous preventive maintenance program will be established for landfill operating equipment to maximize performance and availability. In general, equipment will be inspected and maintained in accordance with the manufacturer's recommendations. A schedule will be followed for conducting routine preventative maintenance activities such as changing filters, changing and/or adding lubricants, introducing antifreeze, etc. Standby equipment will be cleaned, recharged, etc. as soon as practical after each use in order to maintain its readiness. If any equipment or associated parts are found to be faulty or worn out, the equipment will be repaired or replaced as soon as practical. Equipment will be available for use at the facility during all hours of operations.
Leachate Systems

The leachate collection and management systems will be inspected on a routine basis for evidence of clogging or need for general system repair. Areas specifically targeted for maintenance inspections include: pumps and controls, collection points, the leachate storage system, leachate containment structures, and collection pipe. Any observed damage or deficiencies will be quickly repaired following detection.

The leachate collection system in Landfill No. 3 will include cleanout risers that can be accessed from the ground surface. The leachate management system has been designed to safely handle leachate during routine maintenance and repair activities.

Monitoring Systems

The landfill gas monitoring probes and groundwater monitoring wells will be inspected during regular sampling events for structural integrity and proper function. Damaged probes or wells will be repaired or replaced as soon as practical. The continuous methane detection devices located in buildings at the facility will be inspected monthly.

Cover Systems

Daily, intermediate and final cover will be constructed and maintained in accordance with the specifications outlined in this application. Areas with daily cover will be inspected and maintained each operating day. The integrity of intermediate cover will be inspected on a quarterly basis and following major storm events and periods of prolonged or rapid snow melt. Any intermediate cover that becomes excessively eroded or damaged will be regraded and compacted to ensure the waste is covered at all times.

The final cover will receive a protective soil layer and vegetative cover. The integrity of the final cover will be inspected a minimum of once per quarter throughout the facility's operating period. Post-closure period inspections frequencies are described in the approved Post-Closure Care Plan. Any eroded or damaged area will be promptly repaired. Preventative measures will be employed to control erosion of the protective soil layer in areas where the vegetative cover has not yet been established.

As part of the normal maintenance activities, the final cover will be monitored for settlement. If areas of differential settling are observed that could cause ponding of water on the cover, the area will be regraded.

Drainage/Erosion Control Systems

All stormwater basins, diversion ditches, perimeter ditches, terrace berms, and culverts will be routinely inspected for siltation and erosion. As necessary, these structures will be cleaned, regraded, relined, rip-rapped or otherwise repaired to restore design capacities and correct problem areas.

All erosion control devices will be routinely inspected in accordance with the site NPDES permit. As necessary, silt accumulations will be removed and the devices repaired or expanded to maintain adequate erosion/siltation control and runoff water quality.

Access Controls
Structures such as fences that are used to restrict access to the facility will be inspected regularly to ensure their continued integrity. Any structures exhibiting signs of collapse or damage will be repaired. Temporary fencing, security services, or other measures will be used to prevent unauthorized access to the facility and active face until the permanent structures are repaired.

Roads

On-site roadways will be kept in good operating condition at all times. Roads will be graded and potholes will be filled as necessary to keep the surface safely passable. Mud accumulations and debris which may fall from outgoing vehicles will be promptly removed. Snow will be cleared during and/or following heavy snowfalls.

Subsidence Monitoring

A Mine Subsidence Plan has been developed for the Facility to address any unlikely subsidence that may occur at the facility due to historic mining operations that occurred in the vicinity of the site. The Mine Subsidence Plan is provided in Appendix R. Although the expanded waste boundary has been positioned well outside any areas which are potentially susceptible to subsidence, some of the associated ancillary structures have been located inside of the angle of draw or directly over mined areas. These structures include the Northeast and Southeast Stormwater Basins, the Scale House, and the Citizens' Convenience Center.

Subsidence monitoring will be completed as outlined in the plan. The IEPA will be promptly notified in the unlikely event that a mine subsidence event has occurred that presents a threat to public health, welfare or safety. Emergency measures may be taken under the direction of a licensed Professional Engineer, as necessary. All response measures shall be properly documented.

Leachate Management and Monitoring Procedures

The leachate collection, storage, and recirculation system details are shown on the drawings. The following sections describe their operations.

Leachate Collection System

Leachate flows by gravity into perforated HDPE collection pipes spaced at intervals along the bottom of the landfill. Collection pipes are sloped to extraction points located along the perimeter of the waste boundary. Leachate is removed from each collection point using an appropriate pump.

The leachate extraction pumping systems are designed to operate automatically. These systems will rely upon mechanical and electrical components that will require routine system checks and maintenance to ensure satisfactory performance. Routine checks will include recording the volume of leachate extracted from each sump pump and the liquid levels within each sump. This information will be used to ensure that the leachate pumps are operating properly and indicate the need for pump cleaning and/or replacement. Other specific checks and maintenance will depend upon the specific components that are selected, but generally will be performed in accordance with the manufacturers' recommendations. Please see the drawings for conceptual details of the leachate
recirculation system. All pumps, meters, valves, and monitoring stations that control and monitor the volume of leachate are part of the facility and will be accessible to the operator at all times.

**Leachate/Condensate Recirculation**

Leachate will be recirculated via either temporary leachate recirculation sumps, leachate recirculation wells, or lateral leachate recirculation lines (recirculation laterals), as shown on the approved drawings. The landfill will be inspected each operating day for the presence of leachate seeps whenever leachate is recirculated. See the following section for response activities in the event leachate seeps are observed.

Most leachate will be automatically recirculated via underground piping directly connecting the leachate extraction pumps to the leachate recirculation wells and/or recirculation laterals. These systems will require little operational attention beyond maintaining the leachate pumps as previously described.

Leachate may also be recirculated into the temporary leachate sumps, leachate recirculation wells, or recirculation laterals via above-ground fittings. Leachate may be transported to the temporary leachate sumps, leachate recirculation wells or recirculation laterals for recirculation via the above-ground fittings using either above-ground piping/hoses, or a vehicle or trailer-mounted tank. The above-ground fittings include a flow meter, ball valve, and quick-connect coupling. The ball valve will be closed except while leachate is being recirculated through the above-ground fitting. The above-ground fitting assembly will be checked for leaks during the start-up of recirculation operations, which will be ceased in the event a leak is detected.

Because of the potential for surface leaks, recirculating leachate via the above-ground fittings shall only be performed under the following conditions:

- During landfill operating hours only,
- During periods of no precipitation, and at least 4 hours following the end of a period with measurable precipitation, and
- In areas where the landfill surface slopes away from the landfill perimeter such that any accidental surface discharges can be readily collected for proper management.

The leachate recirculation wells and recirculation laterals incorporate significant permeable zones to distribute leachate. However, because leachate is recirculated directly into the landfill mass while using the temporary leachate recirculation sumps, an observation well will be installed near each temporary leachate recirculation sump as shown on the drawings. PCCLI will monitor the observation well each day that leachate is recirculated into the adjacent temporary leachate recirculation sump, and will cease recirculating into the sump if leachate is observed in the observation well.

A recirculation log will be maintained whenever leachate is recirculated. The recirculation log will include the following information:

- Date, start and stop times of leachate/ recirculation into each recirculation device;
Approximate location, size and depth of the leachate recirculation;

Volume of leachate/that is recirculated; recorded daily for leachate recirculation via the above-ground fittings, and weekly for leachate recirculated via the underground piping system.

Documentation regarding inspection of the temporary leachate recirculation sump monitoring hole for the presence of leachate; and

Documentation of any leachate releases and corrective actions taken.

The log will be placed in the facility's Operating Record.

Response Plan to Potential Leachate Runoff

The Operator shall promptly respond to leachate seeps to prevent leachate from commingling with storm water runoff. Response procedures shall include the procedures below as appropriate.

- Identify the source of the leachate and take action to prevent additional leachate from escaping. This might include ceasing or reducing leachate recirculation operations in a particular area, and/or adding cover materials.

- Contain leachate runoff prior to being discharged beyond the site boundary. Containment can consist of placing earthen berms, constructing diversion ditches, adsorbing the leachate with soil or other absorbents, etc.

- Remove and properly dispose soil contaminated by leachate.

Leachate Disposal

The leachate level within the leachate storage tank(s) will be routinely checked and emptied as needed. The stored leachate will either be transferred to the leachate recirculation system, solidified on-site, or hauled to a properly permitted disposal facility.

Tanker trucks will be parked on the truck load-out spill containment pad while transferring leachate from the leachate storage tanks.

Landfill Gas Collection and Control System

The landfill gas collection and control system will require routine attention to ensure that landfill gas is adequately controlled in compliance with applicable regulations, the system is functioning properly, and the system operations do not contribute to a landfill fire. Routine system monitoring and operations will include the following:

- Landfill gas quality and pressure (vacuum) monitoring at each gas extraction wellhead. Measurements, at a minimum will include methane content, nitrogen content, oxygen content, temperature, and pressure.

- Wellfield balancing to ensure that nitrogen, oxygen, temperature, and pressure are within acceptable ranges.
• Control system inspections and monitoring, including gas transmission header pipe vacuum and flow. Additional monitoring activities will depend upon the specific control system equipment.

• Control system maintenance, as recommended by the equipment manufacturer.

Stormwater and Erosion Control

Stormwater controls are integrated into the facility design to ensure that stormwater is properly controlled and does not contaminate nearby streams. The stormwater controls include stormwater terraces and letdown channels on the final cover, perimeter channels at the landfill toe, and two stormwater detention basins.

PCCLI will maintain the stormwater controls to ensure that they function properly. Maintenance activities include the following:

• Remove accumulated sediment and debris from the channels and detention basins,

• Repair vegetation, erosion, and channel lining materials, and

• Repair or replace damaged culverts, etc.

The Northeast and Southeast Detention Basins incorporate engineered outlet works that are designed to protect the water quality in nearby streams. Each outlet includes a valved discharge and emergency spillway. The Northeast and Southeast Detention Basins are designed to retain all run-off from the 25-year, 24-hour storm with the valved discharge closed. The emergency spillways are designed to safely pass the peak discharge from the 100-year storm.

PCCLI will open the valved discharges to release stormwater from the detention basins once the water collected in the basins have sufficiently cleared of sediment. The valved discharge will then be promptly closed prior to the next storm event. Discharges will occur on a frequent basis in order to maintain full design capacity within the basins.

Health and Safety Plan

PCCLI has developed a comprehensive Health and Safety Plan to ensure that all supervisors and employees follow safe construction, operating, and emergency procedures at the site. Employees will be trained in safe operating practices, recognition of potential site hazards, and accident prevention. The Health and Safety Plan will also serve to minimize the danger to the surrounding area in the unlikely event that an emergency situation does occur (e.g. fire, spill or operational accident). The Health and Safety Plan is provided in Appendix S of this application.

Environmental Monitoring

The facility incorporates extensive environmental monitoring systems to confirm that the facility is environmentally secure. The environmental monitoring systems and monitoring procedures are described in the facility Environmental Monitoring Plan. The Facility Manager is responsible for maintaining the environmental monitoring systems in proper working condition. This includes ensuring that surface water is well drained.
away from the groundwater monitoring wells and perimeter gas probes, safe access is provided to the monitoring locations, and the monitoring wells/probes are adequately secured.

Operating Record

The Operator will maintain at the facility, or in an alternative location specified by the IEPA, an Operating Record. The Operating Record will include a copy of all information submitted to, and received by, the IEPA pursuant to 35 IAC 812 and 813 as it becomes available. At a minimum, the Operating Record will contain the following information, even if such information is not required by 35 IAC 812 or 813:

- Any location restriction demonstration required by 35 IAC 811.302(e), 812.109, 812.110, 812.303, and 812.305,
- Inspection records, training procedures, and notification procedures required by 35 IAC 811.323,
- Gas monitoring results and any remediation plans required by 35 IAC 811.310 and 811.311,
- Documentation of the design of the leachate recirculation system,
- Any demonstration, certification, monitoring results, testing, or analytical data relating to the groundwater monitoring program required by 35 IAC 811.319, 811.324, 811.325, 811.326, 812.317, 813.301, and 813.302,
- Closure and post-closure care plans and any monitoring, testing, or analytical data required by 35 IAC 811.110, 811.111, 812.114(h), 812.115 and 812.313, and
- Any cost estimates and financial assurance documentation required by 35 IAC 811 Subpart G.