

US EPA ARCHIVE DOCUMENT

City of Crown Point, Indiana

QUALITY OF LIFE PLAN

Indiana CLEAN Community Challenge

September 2007



City of Crown Point, Indiana

QUALITY OF LIFE PLAN

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1. City of Crown Point, Indiana Mission Statement

The City of Crown Point is committed to preserving and protecting the beauty and health of our community's environment. Crown Point demonstrates this commitment by:

- Complying with requirements established by the state and federal regulatory commissions;
- Honoring voluntary commitments toward the environment; and
- Seeking continual environmental improvement by preventing pollution and promoting the efficient use of energy and natural resources within our local government.

Crown Point will strive for a better quality of life for all members of our community. We will help unite the community for the common good of the environment by creating an environmental stakeholder group representing government, business, and residents. This stakeholder group will work together to create and lead outreach projects to benefit the environment of the entire community.

Crown Point will unite this stakeholder group to fulfill an environmental mission which includes the following:

1. Foster environmental awareness
2. Encourage respect for the environment
3. Create measurable goals which will have a positive impact on the environment
4. Monitor performance on these goals
5. Share environmental decisions and performance with the community

Crown Point's mission statement will be adopted through Resolution. A signed and dated copy is included in Attachment 1.

2. Responsibilities Defined

Stakeholder Committee

The City of Crown Point, Indiana stakeholder committee is responsible for completing the requirements of the Indiana CLEAN Community Challenge and for implementing Crown Point's Quality of Life Plan.

The stakeholder committee is ultimately responsible for the preparation of the Quality of Life Plan in accordance with the Indiana CLEAN Community Challenge program, submitting the Quality of Life Plan for IDEM approval, and implementing Quality of Life goals. The roles and responsibilities of the stakeholder committee members are designed to be specific to the Quality of Life Plan development and implementation.

The stakeholder committee is comprised of various key City representatives:

Mayor

As the City of Crown Point's chief executive, the Mayor is responsible for inviting department representatives to participate on the stakeholder committee and implementing the Quality of Life Plan. The Mayor is also responsible for adopting a mission statement through Resolution.

Stakeholder Committee Leader

Crown Point's Special Projects Coordinator, Donna Daugherty, has been appointed to serve as the Stakeholder Committee Leader (SCL). The SCL has the authority and responsibility to ensure that the Quality of Life Plan is established, implemented, and maintained in accordance with the requirements of the Indiana CLEAN Community Challenge program. The SCL has the ability to revise and update the Quality of Life Plan documents (hard copies and electronic versions) and is responsible for coordinating the stakeholder committee, reporting to the Mayor on the performance of the Quality of Life Plan, and coordinating internal audits.

Local Government Coordinators

Local Government Coordinators (LGC) are department superintendents, directors, managers, or Chiefs. LGCs are responsible for all CLEAN communications between the stakeholder committee and each respective government operation identified in the Quality of Life Plan. The City operations included in Crown Point's Quality of Life Plan is the Department of Utilities, which includes street, water, wastewater, and motor vehicle operations.

Within their respective departments and operations, each LGC is responsible for:

- Evaluating the list of aspects and impacts associated with City operations and updating the list annually.
- Ensuring compliance with all applicable environmental laws, regulations, and permits within the respective department and operation.
- Communicating objectives and targets created by the stakeholder committee to employees.
- Ensuring employees' environmental awareness and competence.
- Implementing, monitoring, and maintaining Crown Point's Quality of Life Plan procedures and targets.
- Reporting all progress to the stakeholder committee.

Audit Team

City employees will conduct yearly audits by reviewing the Quality of Life Plan and verifying that projects and processes are documented, and adequate measurements are in place for achieving goals. The audit team will use the Quality of Life Plan Internal Audit Checklist provided by the Indiana Department of Environmental Management (IDEM) and the Clean Manufacturing Technology Institute (CMTI) to evaluate the City's Quality of Life Plan and implementation efforts. An Annual Performance Report will be prepared for the Mayor and for submission to IDEM.

3. Environmental Goals

Prioritizing Environmental Aspects

IDEM assisted the city with identifying the aspects and impacts associated with the departments included in the QLP. IDEM provided the Local Government Coordinators (LGC) with a condensed list of aspects and impacts for the participating departments. Each LGC reviewed the list and identified those aspects considered a significant concern in their department. To facilitate the prioritization process, the committee focused on reducing solid and hazardous

waste, reduced fuel use and pollution, regulatory requirements, potential impact on human health, emissions, and the likeliness of success. The stakeholder group then discussed the identified high priority issues and potential program activities. The prioritized list of aspects and impacts is available in Attachment 3.

The list of potential activities was presented to the mayor who selected the five activities to include in the program. The stakeholder group will evaluate the condensed list of aspects annually to ensure it remains up to date with the city's operations.

Identifying Objectives and Targets

For each of the five activities selected, the stakeholder group must establish objectives and targets to minimize the negative impact on the quality of life. Additionally, the stakeholder group must establish and document: legal requirements for each of the five selected aspects, action steps for achieving each objective, authorities and responsibilities for achieving objectives are established, and monitoring and measurement practices. The five aspects addressed in the City of Crown Point Quality of Life Plan and associated objectives, targets, and action plans are:

Objective 1: Cardboard Recycling

Aspect: Cardboard

Impact: Deplete natural resources, reduce landfill life

Objective: Increase cardboard recycling.

Target: Increase cardboard recycling to 100% at Vehicle Maintenance area by fall 2007

Legal Requirements: None

Action Plan:

- Establish baseline of current cardboard recycling tonnage and participating departments (Ben)
 - 10-20% recycled at Vehicle Maintenance garage per week
 - 75% recycled at Water and Wastewater departments per week
 - 10% recycled at Streets per week
- Determine if City could be paid for cardboard recycling (Donna to ask Allied Waste)
- Determine if other departments will participate in cardboard recycling by bringing cardboard to vehicle maintenance area for pick-up. Consider how cardboard will be transported and how often. (Donna to inform other departments)
- Obtain a large dumpster with lid from Allied Waste to collect cardboard and determine how often dumpster needs to be emptied (Donna will notify department of effort)
- Investigate purchasing a cardboard baler to sell bales, reduce storage needed space, fewer pick-ups and less fuel use (Jean Ann from Solid Waste Management District provided figures that determined amount of cardboard would not produce amount needed to sell)
- Obtain size and dimensions of dumpster from Allied

Measurement: Tonnage of cardboard recycled to be recorded monthly by Allied Waste

Objective 2: Reduce potential for leaks and spills

Aspect: Leaks and spills

Impact: Contaminate surface water, groundwater, and soil

Objective: Develop spill containment for used batteries, antifreeze, oil, radiators, and oil filter drums at the Vehicle Maintenance garage and replace spill containers for mosquito control products as well as fuel tanks

Target: Zero potential for contamination from used batteries and storage containers by January 2009

Legal Requirements: Hazardous waste storage, used material storage and handling (oil and antifreeze)

Action Plans:

- Develop baseline of all potential contamination sources—how many and what types of chemicals/items are stored inside, outside, and on trucks? (Ben, Bill)
- Determine what structures and storage materials are best for chemicals used at City—use designated drip pans for each chemical so do not mix hazardous waste streams (Bill)
- Purchase or construct a containment shed to house old batteries (and provide secondary containment) until they are transferred to a recycling center (Ben Vickers and Jim Drackert will develop design plans by January 2008)
- Replace indoor, outdoor, and on-truck spill containers (Bill)
- Develop an SOP for emptying and monitoring condition of drip pans (Bill)

Measurement:

- Number/gallons of items stored with spill containment
- Monitor correct use of SOP

Objective 3: Fluorescent Bulb Recycling

Aspect: Used fluorescent bulbs

Impact: Contaminate surface water, groundwater, and soil

Objective: Develop program to store and transport all used fluorescent bulbs for recycling

Target: Recycle all used fluorescent bulbs by spring 2008

Legal Requirement: Universal Waste Rule

Action Plans:

- Develop baseline of how many bulbs are used/purchased/replaced each year by City
- Evaluate recycling efforts and environmental record of vendors for proper removal and disposal (Donna will research each option and provide arrangements to Jim Drackert by September 2007)
 1. Everlights (suggested by Cathy Csatari of IDEM)
 2. Tom Buford of the Lake Michigan District
- Develop SOP and train employees for handling, storing, transporting, and recycling fluorescent bulbs—ensure collection boxes are labeled as used fluorescent bulbs as part of SOP

Measurement:

- Number of fluorescent bulbs recycled and equivalent HW diverted from landfill
- Monitor correct use of SOP

Objective 4: Increase rate of recycling

Aspect: Recycling

Impact: Conserve natural resources

Objective: Increase residential recycling rate with use of informational brochure

Target: Increase rate of recycling by 10% by spring of 2009

Legal Requirement: Proper management of HHW and electronic items

Action Plans:

- Determine current residential recycling rate
- Determine items that can be collected, when, where, and by whom
- Create informational brochure for residents indicating which items can be collected, when, where, and by whom; listing of amnesty days and sites; and general rules and guidelines for recycling (Donna will coordinate the development, printing and mailing of this brochure with assistance from Jeanann Ficker, Recycling Consultant to the City of Crown Point)
- Use Hammond's existing brochure as a template and Holland's brochure on construction debris
- Determine appropriate method for distributing brochures to residents (e.g., water bills, mailers, grocery stores)

Measurement:

- City's recycling rate (as measured by recycling hauler/city)
- Amount of recyclables

Objective 5: Implement an Environmentally Preferable Purchasing Program**Aspect:** Chemical use**Impact:** Contaminate surface water, groundwater, and soil**Objective:** Establish EPPP to help reduce the number of trips to and from retailers, reduce the number of deliveries, reduce paperwork, decrease the number of small empty containers, reduce the number of waste aerosol cans generated, reduce the toxicity of products used, and reduce management and disposal issues related to hazardous waste.**Target:** Increase the number of environmentally preferable products (EPP) purchased by 10% by summer 2008**Legal Requirement:** Hazardous materials management requirements**Action Plans:**

- Evaluate current purchasing practices
- Identify and list aerosols and chemical products currently purchased and used
- Identify and document a list of resources for evaluating current and potential replacement products
- Identify and document a list of vendors of green products (e.g., concentrated, different packages, water based etc.)
- Identify opportunities for improved practices (e.g., buy in bulk, redistribution, car pool to retailers, pump spray)
- Develop SOPs for green purchasing, green selection criteria, green procedures for product use
- Train employees (through email and departmental meetings) on SOPs and opportunities for improved purchasing

Measurement:

- Number of chemical substitutes identified
- Document usage of policy and substitutes purchased

4. Implementation and Operation Procedures

Document Control

All Quality of Life Plan documents and associated material will be controlled and maintained electronically by the Stakeholder Committee Leader (SCL). Stakeholders can issue new or revise old QLP documents by notifying the SCL. New and revised QLP documents will be reviewed during Stakeholder meetings and notification of new, edited, and obsolete documents will be conveyed via email and discussed at meetings.

Paper copies of QLP documents will be kept in a locked file and managed by the SCL. Electronic copies will be stored in an electronic folder with limited access. Each department shall keep original records and provide hard copies of records to the SCL for filing. All working documents will be labeled and dated, but remain in the back of the file if obsolete. Documents will be stamped with the date so current copies can be identified. Each department will keep copies of their own records. The methods used for filing such documents will be determined by the Stakeholders in each Department.

Legal and Regulatory Requirements

The task of analyzing, documenting, and updating legal requirements applicable to the selected five aspects is the responsibility of each department head. Legal Counsel is handled by the City Attorney, Rich Wolter, and Assistant City Attorney, Pat Shuster. Environmental issues will be addressed with input from the Engineering Department. Additional information regarding legal requirements is obtained by attending training and seminars. Each department head retains and stores any permits, records, (e.g., monitoring, training, calibration) or procedures required for environmental aspects in their department.

Employee Training

Local Government Coordinators will determine which Standard Operating Procedures (SOPs) are needed for the environmental aspects of their operations. The SOPs will be communicated through weekly safety meetings, via emails, or through “tailgate” training.

General CLEAN training will be added to regular training for each department. Training records will be kept by the Training Director, Toni Kirk. Competence and awareness of employees will be reviewed by Department Heads on an ongoing basis.

New or Changed Services or Processes

When the City considers modifying or adding services or processes, environmental impacts and pollution prevention will be included in the planning process. This will be done by including these items on meeting agendas and soliciting input from stakeholders when the potential change first comes into consideration.

Emergency Preparedness and Response Plans

Department emergency preparedness and response procedures are established and maintained to respond to any accidents, spills, or emergency situations, including hazmat and MS4 training. Accident reports and departmental reviews are conducted after practice drills and incidents to improve preparedness and response.

Emergency Management Services, led by Director Jimmy Hultz, establishes and maintains emergency response procedures which are revised and updated as needed. Department Heads create accident reports, forward them to the Mayor's Administrative Assistant, Donna Martin, who then forwards them to the legal department or the municipal insurance company.

Corrective Action

Periodic audits, incident review, after-action reports, changes in legal requirements or City activities, and annual review of the Quality of Life Plan (including the emergency response plan) may indicate that procedures are not being followed, are ineffective or are no longer appropriate. When this occurs, a root-cause analysis will be conducted to determine the appropriate corrective actions(s). Corrective actions will be communicated, training will be provided, and documents will be revised as needed. The corrective actions will be evaluated for effectiveness and changed again as needed. Records will be kept of the analysis, the changes, and the results of the evaluations using the Corrective Action Tracking form located in Attachment 2.

Internal Communication

Internal communication provides an overview of the Quality of Life Plan goals, procedures, and progress toward targets to employees of the City, contractors involved with City operation(s), and all individuals that may affect objectives and targets, compliance, or environmental performance. Internal communication is conducted to assist with the implementation and operation of the Quality of Life Plan. Internal communication occurs through email, interoffice mail, Centrex system, and weekly staff meetings.

External Communication

External communication ensures the viability and integrity of the Quality of Life Plan and may be conducted as outreach or in response to an inquiry or complaint. The City of Crown Point receives communication from citizens, agencies, etc. via landline phones, cell phones, email, U.S. mail and the City website. The City shares information with citizens via the City's website, inserts in water bills, the Hub City Monthly newsletter, press releases to local newspapers, and other distributed informational materials.

5. Monitoring and Progress Review

Management Review

The Stakeholder Committee Leader (currently the Special Projects Coordinator) will coordinate quarterly meetings with stakeholders to assure initial and continued implementation and improvement of the QLP and associated SOPs in each department. The Stakeholder Committee Leader will maintain communication with IDEM to assist with addressing future departmental aspects, impacts, and targets.

Internal Audit

An internal audit will be conducted within one year of the date of designation as a CLEAN Community. The audit will be conducted by the Stakeholder group (composed of Department Heads), and will be led by IDEM and the Stakeholder Committee Leader. The audit will be

conducted and documented using the Quality of Life Plan Internal Audit Checklist provided by IDEM. By evaluating progress toward targets and QLP procedures, it will be possible to identify opportunities for improvement and determine if modifications are needed to improve the QLP and environmental goals.

Community and Business Outreach

Community and Business Outreach procedures ensure City residents are informed of important issues related to the City's environmental performance and that progress toward achieving objectives and targets is shared with the community. Outreach regarding the QLP objectives and targets, as well as important issues related to the City's environmental performance will be conducted by the City's Director of Governmental Affairs, Adam Graper through water bill inserts, Hub City Monthly, press releases to local newspapers, and the City website. The City will also provide information regarding the city's QLP performance in the Annual Performance Report to IDEM.

6. Quality of Life Plan Attachments

Attachment 1: City of Crown Point Resolution

Need resolution

The CLEAN Community Challenge Resolution is on the Council Meeting agenda scheduled for Monday, October 1, 2007...insert here

Attachment 2: Corrective Action Report Form

Directions: Record the date and person who noticed the issue. Record a brief description of the root cause analysis. State what will be done to address the issue. State a timeframe for evaluating effectiveness of the correction.

Date of observation	Person making the observation
4.25.06	Steve Smith

Observation	Root Cause Analysis
Truck number x was left idling in front of the library for 15 minutes. This does not follow the city's "no idling" policy	The driver is a new employee and has not been given the proper training regarding idling. The system for ensuring that new hires are given all required training is not adequate and should be improved.

Proposed Corrective Action
Human resources will be provided with a list of training needs for each position. During the initial orientation employees and their supervisors will be given a printed list of all the training requirements for that position. Supervisors will check this list to ensure it is current and ensure that all the training requirements are met.

Evaluation of Corrective Action
The corrective action will be evaluated within six months or after the next new employees is hired (which ever comes first).

Effectiveness of Corrective Action
The new SOP for providing training was used on 10/8/06 and 11/5/06. In both incidences, it appears to be effective in ensuring that new hires are provided with necessary training.

Attachment 3: Aspects and Impacts

Aspects	Impacts	Significant?
AIR		
Aerosol cans	Degrade air quality	
Air emissions	Degrade air quality	Yes
Dust and paint chips from sandblasting	Degrade air quality	
Dust, noise, and vibrations	Degrade air quality	
Fugitive emissions	Degrade air quality	
Painting street lights and other fixtures	Degrade air quality	
Fire	Degrade air quality and public health concerns	
Fuel, oil, and electricity use from vehicles and tools	Deplete natural resources and degrade air quality	Yes
Vehicle and equipment use for travel and maintenance	Deplete natural resources and degrade air quality	Yes
Freon	Deplete ozone	
Vehicle impacts due to traffic flow	Fuel use and degrade air quality	

Aspects	Impacts	Significant?
Hazardous Material		
Spilled, wasted, misused hazardous materials such as fuel and paints	Contaminate groundwater, surface water, and soil	Yes
Lead-containing dust, sand, paint chips, or chips	Contaminate groundwater, surface water, and soil, Hazardous Waste	
Asbestos floor tiles, mastic, ceiling tiles, pipe wrap, siding, and flashing	Degrade air quality and hazardous material	
Pesticide and rodenticide	Exposure to non-target species and humans	Yes
Chemical use	Hazardous chemicals	Yes
Non-latex paints and stains	Hazardous chemicals	
Fertilizers	Hazardous material	
Paints, solvents, inks, and adhesives	Hazardous material, solid waste, and deplete natural resources	
Aerosol cans	Hazardous waste	Yes
Cleaners for paint equipment, asphalt trucks, or garage surfaces	Hazardous waste	
Contaminated tools, rags, absorbents, or paper towels	Hazardous waste	
Fluorescent lights	Hazardous waste	Yes
Lead pipes and solder	Hazardous waste	
Mercury in thermostats, switches, or drain traps	Hazardous waste	
Non-empty, no longer functional aerosol cans	Hazardous waste	
Polychlorinated biphenyl (PCB)-containing transformers and capacitors	Hazardous waste	
Rechargeable batteries (Nickel cadmium and Lithium)	Hazardous waste	
Roofing tars and caulks	Hazardous waste	
Solvents, thinners, metal cleaners, etching compounds	Hazardous waste	
Spilled cleaning chemicals	Hazardous waste	
Waste adhesives	Hazardous waste	

Waste agrochemicals (mis-mixed, excess mixed product, mis-stored, rinsate from cleaning equipment and empty containers)	Hazardous waste	
Waste electronic equipment	Hazardous waste	
Waste lead-acid batteries	Hazardous waste	
Absorbents and hazardous waste from clean up	Hazardous waste	
Chemical cleaner	Hazardous waste	
Mercury-containing equipment	Hazardous waste	
Pesticide drift or overspray	Human, domestic, and wildlife exposure to pesticides	

Aspects	Impacts	Significant?
Water		
Water flow in toilets and sinks	Add load to wastewater treatment plant	
Water use and wastewater from clean up	Add load to wastewater treatment plant	
Wastewater generated	Add load to wastewater treatment plant	
Infiltration into sewer lines	Add load to wastewater treatment plant	
Paint removal and new paint	Add load to wastewater treatment plant and contaminate groundwater, surface water, and soil	
Debris containing lead-based paint	Contaminate air, groundwater, surface water, and soil	
Potential backflow or cross connections	Contaminate drinking water	
Infiltration into water lines	Contaminate drinking water	
Metal parts (tire weights, wheels, brake drums, nuts, bolts, body parts, brackets)	Contaminate ground water	
Materials used (landscape timber and railroad ties)	Contaminate groundwater, surface water, and soil	
Oil storage and delivery (leaking tanks and pipes)	Contaminate groundwater, surface water, and soil	
Oil-water mixture	Contaminate groundwater, surface water, and soil	
Overspray	Contaminate groundwater, surface water, and soil	
Painting street lights and other fixtures	Contaminate groundwater, surface water, and soil	
Polychlorinated biphenyl (PCB)-containing transformers and capacitors	Contaminate groundwater, surface water, and soil	
Release from sewer lines	Contaminate groundwater, surface water, and soil	
Run-off (malfunction of facility or excess precipitation)	Contaminate groundwater, surface water, and soil	
Salt or chemical for ice control	Contaminate groundwater, surface water, and soil	
Sludge contaminated with regulated metals (Cadmium, Copper, Lead, Mercury)	Contaminate groundwater, surface water, and soil	
Solvents and paints	Contaminate groundwater, surface water, and soil	
Spill raw sewage and sludge	Contaminate groundwater, surface water, and soil	
Spilled brake, radiator, transmission, windshield fluid, oil, antifreeze, solvents, paints, or cleaners	Contaminate groundwater, surface water, and soil	
Spilled fuel during filling, overfill, or transporting	Contaminate groundwater, surface water, and soil	
Spilled heating oil	Contaminate groundwater, surface water, and soil	
Spilled materials during transport	Contaminate groundwater, surface water, and soil	
Stormwater runoff	Contaminate groundwater, surface water, and soil	
Underground storage tank and above ground storage tank for fuel	Contaminate groundwater, surface water, and soil	
Vehicle leaks and operating condition	Contaminate groundwater, surface water, and soil	

Wastewater (detergents, salt, suspended solids, oil, antifreeze, brake fluid, radiator fluids, solvents)	Contaminate groundwater, surface water, and soil	
Abandoned chemicals	Contaminate groundwater, surface water, and soil	
All spills	Contaminate groundwater, surface water, and soil	
Chemical to sanitize tank	Contaminate groundwater, surface water, and soil	
Chemical use	Contaminate groundwater, surface water, and soil	
Contaminated snow from parking lots	Contaminate groundwater, surface water, and soil	
Contaminated tools, rags, or paper towels	Contaminate groundwater, surface water, and soil	
Ferric chloride spill	Contaminate groundwater, surface water, and soil	
Fertilizer or pesticide contaminated runoff	Contaminate groundwater, surface water, and soil	
Fuel leak from tank or appurtenances	Contaminate groundwater, surface water, and soil	
Fluids in the filters	Contaminate groundwater, surface water, and soil	
Pesticides, fertilizers, and contaminated rinsate	Contaminate groundwater, surface water, and soil, and kill non-target species	
Agrochemical contaminated rinsate	Contaminate groundwater, surface water, and soil, and kill non-target species	
Litter	Contaminate surface water	
Overflows of untreated wastewater	Contaminate surface water	
Contaminated wastewater	Contaminate wastewater treatment plant	
Solid waste (sludge)	Decrease landfill life and reduce suspended solids to surface water	
Soil erosion	Degrade surface water quality	
Release from water lines	Deplete natural resources	
Water leaks	Deplete natural resources	
Water use	Deplete natural resources	
Water used to flush lines and hydrants	Deplete natural resources	
Operation and maintenance	Improve groundwater quality	
Wellhead protection, flood control, and stormwater management	Prevents contamination of drinking water supply	
Mulch	Reduce need for pesticides and watering	
Sediment loaded wastewater	Sedimentation in surface water	
Sediment from flushing lines or cleaning and unclogging sewers	Sedimentation in surface water and contaminate groundwater, surface water, and soil	
Install and remove underground tanks	Sedimentation in surface water and contaminate groundwater, surface water, and soil	
Wax strippers	Stress on microbes at wastewater treatment plant or in septic	

Aspects	Impacts	Significant?
Materials		
Used tires	Banned from landfills	
Replace doors, windows, hardware, and glass	Conserve energy	
Leachate from treated lumber	Contaminate groundwater, surface water, and soil	
Toner cartridges	Decrease landfill life	
Vacuum bags	Decrease landfill life	
Fluorescent and halogen lights	Decrease landfill life	
Sampling containers	Decrease landfill life	
Drywall, tape, screws, joint compound, and nails	Decrease landfill life	

Empty containers, packaging, and used personal protective equipment	Decrease landfill life	Yes
Ink for printers	Decrease landfill life	
Light bulbs and ballasts	Decrease landfill life	
Pipes and valves	Decrease landfill life	
Miscellaneous paper, plastic, metal, white-out, and packing materials	Decrease landfill life	Yes
Miscellaneous solid and construction waste	Decrease landfill life	Yes
New and old shingles, nails, flashing, and tar paper	Decrease landfill life	
Paper waste	Decrease landfill life	Yes
Solid waste	Decrease landfill life	
Waste cans, brushes, and tape	Decrease landfill life	
Carpets, tiles, and wood	Decrease landfill life and deplete natural resources	
Miscellaneous parts repair and replacement	Decrease landfill life and deplete natural resources	
Stored new and used fluids and filters (oil, brake, radiator, transmission, antifreeze, windshield)	Deplete natural resources	
New tires	Deplete natural resources	
Paints and stains	Deplete natural resources	
Paper use	Deplete natural resources	Yes
Fuel use	Deplete natural resources	
Recyclable materials	Extend landfill life	
Mulch	Improve quality of life	
New construction	Improve quality of life	
Toxic organic and inorganic components	Negative health affects	
Labeling and signage	Proper response during incident	
Antifreeze	Toxic chemical	

Aspects	Impacts	Significant?
Other		
Contaminated soil from excavation	Contaminate soil	
Food waste	Decrease landfill life and add load to wastewater treatment plant	
Grass clippings and leaves	Decrease landfill life or compost	
Dust, noise, and vibrations	Degrade quality of life	
Power use	Deplete natural resources	
Contamination of oil and antifreeze	Deplete natural resources	
Electricity use	Deplete natural resources	Yes
Contaminant-free sludge that is a rich organic nutrients	Enrich vegetation	
Carcasses	Health risk and odor	
Land use (Brownfields, conservation)	Improve land use	
Aesthetics	Improve quality of life	
Set and implement standards	Improve quality of life	
Light	Improve quality of life and safety, Negative impact on wildlife	
Precipitation in secondary containment	Increase corrosion of tanks	
Increased impermeable surface	Increase flooding	

Practices that comply with regulations	Legal issues, quality of life, public relations, air, and water	
Disturb native flora and fauna, and clearing land	Loss of habitat impact on flora and fauna, and endangered, threatened, or native species	
Fire from controlled burns in natural areas	Negative impact on wildlife	
Methane	Vent or collect for energy	