

Town of Sellersburg
Town Council Workshop Meeting
Meeting Minutes

DATE: May 18, 2016

CALLED TO ORDER: President Paul J. Rhodes called the workshop meeting to order at 6:00 p.m. at the Sellersburg Town Hall, 316 E. Utica Street, Sellersburg, Indiana.

ROLL CALL: President Paul J. Rhodes, Vice President Brad J. Amos, 2nd Vice President Martina P. Webster, Town Council Attorney Jacob C. Elder – present.

Council Member William J. Conlin, Council Member James H. LaMaster, Clerk Treasurer Michelle D. Miller – not present.

PLEDGE OF ALLEGIANCE: By all present

WORKSHOP:

Mike Harris of JTL presented slides and information regarding the Clark-Floyd Landfill Leachate Pump Station and Force Main on behalf of the Clark County Commissioners, Clark-Floyd Landfill, LLC, and Mr. Bob Lee, the landfill operator. (All handouts and PowerPoint presentation are attached hereto). The County and landfill are requesting to tap into the Town of Sellersburg's wastewater system in order to pump leachate to the Town's treatment facility.

Dan Ernst of the Indiana DNR presented information that DNR would be interested in tapping into the town's system as well should the landfill be successful with its request.


Motion: Martina Webster Second: Brad Amos - to enter the PowerPoint and other handouts into the record. Vote: 3-aye, 0-nay, motion approved

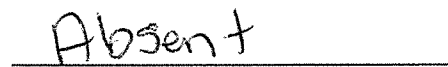
ADJOURN:

Motion: Brad Amos Second: Martina Webster Vote: 3-aye, 0-nay, motion approved and meeting adjourned at 7:22 p.m.


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Sellersburg Town Council Workshop
May 18, 2016



Paul J. Rhodes, President


James H. LaMaster, Council Member


Brad J. Amos, Vice President


William J. Conlin, Council Member


Martina P. Webster, 2nd Vice President


Attest: Michelle D. Miller, Clerk Treasurer

**DRAFT TERMS AND CONDITIONS
MEMORANDUM OF UNDERSTANDING
BY AND BETWEEN
THE TOWN OF SELLERSBURG, INDIANA
AND CLARK COUNTY INDIANA**

This memorandum is entered into effective this ____ day of _____ 2016 by and between the Clark County, Indiana (County) and the Town of Sellersburg (Town), which is located within the County.

Whereas the Town and the County (County) desire to enter into this agreement to specify the manner in which certain services which benefits the County and the Town.

Now therefore the parties hereby agree as follows:

1. The Clark-Floyd Landfill is owned jointly by Clark and Floyd Counties, and is located within Clark County, Indiana. The landfill is operated by Clark-Floyd Landfill, LLC. The County is expanding the capacity of the landfill and is planning to construct a pumping station and force main to pump leachate generated at the landfill to the Town of Sellersburg Waste Water Treatment Collection System. This leachate may also be hauled to the Town's system.
2. The pumping station is being designed to pump leachate within a 11,500' force main at a rate of 80 gpm (0.115 MGD) and discharge into the Sellersburg sewer system at the Sunset Hills Pumping Station. From there the flow will travel a distance of nearly 6 miles to reach the 2.3 MGD WWTP. Thus, sufficient blending of the leachate with the domestic sewage flow will occur. It is believed that sufficient capacity exists at the plant to receive this additional flow.
3. The County would give the Town permission to designate any capital funds used for design or construction of this project as matching funds towards future grant (or loan?) applications for capital improvements within the Town.
4. During periods of wet-weather flow, leachate flow may not be pumped in the force main, at the discretion and control of the Town.
5. Sellersburg currently has an Industrial Pretreatment Ordinance, which has established industrial pretreatment local limits (Title V: Public Works, Chapter 54: Industrial Pretreatment). Three sampling rounds of leachate have been taken from the Landfill's existing leachate tanks. These samples provide a representative characterization of the leachate. All laboratory sampling results (Heritage Labs) are well below the industrial pretreatment local limits.
6. The County will work with the Town as necessary to provide any information, such as these sampling results, to any regulatory/permitting agencies (Indiana Department of Environmental Management). It is anticipated that some type of modification of the Town's current NPDES permit would be required. The County would suggest a

frequency sampling of the leachate be made on a semi-annual basis in the NPDES permit.

7. Provision is being made to pretreat the leachate with odor control and/or aeration.

8. Fees and Charges

- The estimated one-time Tap-in fee is: \$249,600.
- The monthly estimated direct and usage charges and surcharge fee would be \$4,800 monthly (\$57,600 annually). This will be calculated based on sampling test results.

9. A flow meter will be installed at the landfill pump station. The monthly readings will be used to calculate billing invoices

10. After construction, the lift station, controls, and other related assets and force main will become the property of the Town.

11. The State of Indiana Department of Natural Resources is in discussion with the stakeholders regarding the possible demolition of the WWTP located at Deam Lake. Deam Lake is located within Clark County, Indiana Discussions are underway to possibly send their domestic sewage flow to the Town via the pumping station at the landfill and then along the pipeline to the Sellersburg system. Design consideration is being included in the pumping station at the landfill.

12. Time is of the essence and it is request that an agreement be reached immediately to begin accepting leachate at the Sellersburg system.

13. Either party may terminate the Memorandum by giving the other part not less than thirty days prior written notice of termination. This memorandum shall remain in force until terminated.

This Memorandum is executed as of the above written date.

CLARK COUNTY

TOWN OF SELLERSBURG

Signature

Signature

(Include Witness and Notary blocks)

Technical Memorandum

Town of Sellersburg

City Council Briefing Package

Clark-Floyd Landfill Leachate Force Main Project

JTL Project No. 10123

December 6, 2011

1 BACKGROUND

Clark County Indiana is expanding the capacity of its landfill. During and shortly after the expansion it is anticipated that the quantity of leachate will increase, making the current means of trucking the leachate to the Jeffersonville treatment system undesirable. A more preferable method for managing the leachate would be to pump it through a force main to a nearby wastewater treatment system. The closest treatment facility having adequate capacity is Sellersburg's system. Please refer to Attachment 1 for a map of a possible force main alignment.

Additionally, The State of Indiana Department of Natural Resources is in discussions with the stakeholders regarding the possible demolition of its WWTP located at Deam Lake. Discussions are underway to possibly send their domestic sewage flow to the Town via the pumping station at the landfill and then along the pipeline to the Sellersburg system. Design consideration is being included in the pumping station at the landfill. Attachment 2 provides a map which shows how the Deam Lake force main could be built upstream of the landfill force main.

2 BENEFITS AND MANAGING THE RISKS

The following provides a list of the potential benefits to the Town of Sellersburg, and also how the risks from receiving this waste stream can be reasonably managed.

Benefits to Town

- Tap Fee (Immediate Cash Availability)
- Long-term Monthly Cash Flow
- Rehabilitation of Sellersburg system - For example, High School Lift Station structural rehabilitation and installation of odor control system
- Turnover of significant asset base which potentially could be used for Grant Fund Matching Capability
- Additional tap fee and cash-flow from the Indiana Department of Natural Resources' Deam Lake Recreational Facility (domestic sewage)
- Regional Environmental Benefit - reduction of truck traffic for hauling leachate (smaller environmental footprint - green project)
- Potential to take on additional industrial customers as a result of having in place the regulatory process to manage it



Technical Memorandum

Town of Sellersburg

City Council Briefing Package

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JTL Project No. 10123

December 6, 2011

The following provides an example of how the Town can expedite the refurbishment of its High School lift station to address its material condition and odor generation issue.

Cash Availability Benefit Example

+ \$ Tap Fee

- \$ In-Kind Capital/Rehabilitation Projects

Refurbishment of High School Lift Station

Odor Control Upgrade at HS LS or within Sellersburg System

+ \$ Cash Available for Additional Sellersburg Improvements

Managing the Risks

- Risks can be managed with Sellersburg's Professional Operations Staff
- Wet weather flows – leachate flow will not be sent to system during wet weather events (stored at landfill site)
- IDEM is aware of landfill leachate laboratory results and has no major concerns
- IDEM has issued NPDES permits for similar leachate treatment systems for example at Danville, IN (small operational and sampling burden for operations staff)
- Additional Ammonia Load on WWTP – The plant has sufficient capacity to handle this relatively small flow
- Waste stream blended well before sending to treatment plant – does not shock 'bugs
- Pretreatment, Odor Control – Provisions can be made to treat leachate at landfill for potential odor, i.e. aeration
- Metals – relatively low levels detected in waste stream (other known recently visited systems have had no difficulty process handling leachate)

2.1 DISCUSSION

The immediate benefits from receiving this flow appear to be large for the Town. By installing a valve and telemetry at the Perry Crossing lift station, all flow can be turned off by the Sellersburg operator. This will allow the management of wet-weather flows. The flow contribution in comparison to the actual system treatment capacity is small. There will be some metals in the flow, but these amounts appear to be inconsequential.

Additionally, funds from this project will allow the town to address long-standing odor control, safety, and H2S degradation issues at the High School Lift Station.



Technical Memorandum

Town of Sellersburg

City Council Briefing Package

Clark-Floyd Landfill Leachate Force Main Project

JTL Project No. 10123

December 6, 2011

Along with Sellersburg staff we have met with other communities that have similar arrangements, found they experience little to no downside problems with leachate treatment at their facilities.

3 TECHNICAL INFORMATION

3.1 PRELIMINARY DESIGN AND OPERATIONAL INFORMATION

A lift station located at the landfill could be designed to pump leachate within an 11,500' HDPE (strong-durable-seamless) force main at a nearly constant rate of 20 gpm (0.029 MGD). It could discharge into the Sellersburg sewer system at the Sunset Hills Pumping Station. From there the flow will travel a distance of nearly 6 miles to reach the 2.3 MGD Wastewater Treatment Plant. Thus, sufficient blending of the leachate with the domestic sewage flow will occur.

This rate is less than 2 percent of the plant's rated capacity, and it is believed that sufficient capacity exists at the plant to receive this additional flow. During periods of wet weather a valve could shut at the landfill to store any leachate at the landfill until such time the Sellersburg system returned to normal operations. Provision is being made to pretreat the leachate with odor control and/or aeration equipment at the landfill prior to discharging into the Sellersburg system. A flow meter will be installed at the landfill pump station, and monthly readings will be used to calculate billing invoices. It is anticipated that the amount of leachate during the construction period will be greatest then taper off quickly as operations proceed (2-3 year period).

IDNR's Deam Lake's contribution to the waste stream would consist of domestic sewage resulting from its seasonal operational period (typically, April through August) at an average daily flow rate of approximately 5,000 gallons per day. There is sufficient capacity at the Sellersburg WWTP to handle this small flow amount.

3.2 CFL LEACHATE SAMPLES

Sellersburg currently has an Industrial Pretreatment Ordinance, which has established industrial pretreatment local limits (Title V: Public Works, Chapter 54: Industrial Pretreatment). Three sampling rounds of leachate have been taken from the Landfill's existing leachate tanks. These samples provide a representative characterization of the leachate. All laboratory sampling results (Heritage Labs) are well below the industrial pretreatment local limits. A summary of Leachate Analysis Results is provided in Attachment 3.

3.3 REGULATORY INFORMATION



Technical Memorandum

Town of Sellersburg

City Council Briefing Package

Clark-Floyd Landfill Leachate Force Main Project

JTL Project No. 10123

December 6, 2011

Although every system is unique, the recent NPDES permit issued for the Danville, Indiana WWTP shows an example of the additional level of oversight that could be required for a similar type of wastewater treatment facility. This demonstrates that the additional level of oversight is not burdensome. The following excerpts are taken from the Danville, Indiana NPDES permit, and are provided for your information:

Danville Indiana NPDES Excerpts, Industrial Contributions

The permittee accepts industrial flow from Twin Bridges Landfill consisting of 42,000 gallons per day of landfill leachate. Based on this industrial contribution, Non-delegated Pretreatment Program Requirements have been included in Part III of the permit and Whole Effluent Toxicity Testing requirements have been added in Part I.D of the permit. In addition, monitoring requirements for aluminum, cadmium, chromium, copper, lead, nickel, zinc, a-Terpineol, benzoic acid, p-Cresol, and phenol are being included in the permit renewal. These parameters are included in the Federal Effluent Guidelines for Landfill Point Source Category in 40 CFR 445.

Metals/Non-conventional Pollutants

The permittee accepts industrial flow from the Twin Bridges Landfill consisting of 42,000 gallons per day of landfill leachate. Due to the amount of industrial contribution received by the treatment facility, monitoring requirements for aluminum, cadmium, chromium, copper, lead, nickel, zinc, a-Terpineol, benzoic acid, p-Cresol, and phenol are being included in the permit renewal. These parameters are included in the Federal Effluent Guidelines for Landfill Point Source Category in 40 CFR 445. This monitoring is to be conducted quarterly by 24-hour composite sampling. In addition to effluent monitoring and limitations, the permittee is required to monitor the influent wastestream for the above parameters at a frequency of quarterly utilizing 24-Hr. composite sampling.

3.4 OPERATIONAL EXPERIENCE AT OTHER PLANTS WITH LEACHATE

JTL staff along with Sellersburg's operator recently made a site visit to the cities of Georgetown, KY and Lexington, KY. The visit to Georgetown was to understand the impact of leachate flow to their system and their operators experience with leachate. The visit to Lexington was to understand how the city is currently handling their odor issues throughout their collection system. Please refer to Attachment 4 for a summary of the site visit meeting notes.



Technical Memorandum

Town of Sellersburg

City Council Briefing Package

Clark-Floyd Landfill Leachate Force Main Project

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December 6, 2011

4 SELLERSBURG COLLECTION SYSTEM

Recently, and with the permission of the Sellersburg Utility Director and support of the operations staff, JTL performed a high level analysis of the existing Sellersburg collection system. A high level flow model was prepared, lift station drawdown tests were performed at major lift stations and sampling over a two-week period was conducted to determine H₂S levels at the High School Lift station. The main emphasis of this evaluation was to determine what impacts the acceptance of the leachate flow from the landfill may have on the collection system and treatment plant. This evaluation has shown that the small amount flow proposed to be sent to the system would have little operational impact. An outcome of this evaluation did determine that the level of H₂S gas currently being generated within the force main discharging to the HS LS is extremely high. The level of gas is damaging to equipment and can pose a safety concern to personnel.

5 NEXT STEP

- Sign Memorandum of Understanding where Town of Sellersburg agrees to accept Leachate flow from the Clark-Floyd Landfill.





**CLARK-FLOYD LANDFILL
LEACHATE TREATMENT DISPOSAL**

TURKEY RUN FORCEMAIN

JOB NO: 10123

DATE: 12/6/11

SCALE: 1"=1000'

FILE: 10123 Aerial Exhibit



Jacobi, Toombs & Lanz, Inc.
Consulting Engineers & Land Surveyors

120 Bell Avenue - Clarksville, Indiana 47129
812-288-6646 - WWW.JTLENG.COM

SHEET

1

1 of 4



**CLARK-FLOYD LANDFILL
LEACHATE TREATMENT DISPOSAL**

DEAM LAKE FORCEMAIN

JOB NO: 10123

DATE: 12/6/11

SCALE: 1"=1000'

FILE: 10123 Aerial Exhibit



Jacobi, Toombs & Lanz, Inc.
Consulting Engineers & Land Surveyors

120 Bell Avenue - Clarksville, Indiana 47129
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SHEET

2

2 of 4

LEACHATE TEST RESULTS

DATE: 12/6/11



120 Bell Avenue -Clarksville, Indiana 47129
812-288-6646 - WWW.JTLENG.COM

3

3 of 4

[illegible]

Notes:
1. 111 g/mol and, more likely 2, 110, g/mol
2. Lab results believed to be correct, however, based on average calculations

[The following information was sent to Ken Alexander in Paul Luther's email dated October 5, 2011.]

Ken,

Good morning! I wanted to give you a brief update on the site visit Kevin and I made to the Georgetown and Lexington, KY last Thursday. I know this email is kind of lengthy, but we had a very busy day.

Georgetown, KY

While in Georgetown we met with the operators of the Georgetown wastewater treatment facilities and focused our questions on their experience handling landfill leachate in their systems.

We met with Rick Mulberry, WWTP #2 Supervisor, and Brad Parrent, WWTP #1 and #3 supervisor at their Plant #2 Plant. Plant #2 was built as a result of the Toyota Plant that was recently built adjacent to it. This plant is similar to the Sellersburg system, but has a carbon resin system to treat any industrial waste. This plant recently began receiving landfill leachate, and they have never had a problem with it. This would be expected because it was built to treat industrial waste. Rick said that he has been at other plants throughout his career (without any industrial treatment) and has not had any problem with managing leachate (occasionally managing the truck haulers was an issue - traffic issue). Brad said that about three years ago Plant #1 used to receive a stream of landfill leachate (no carbon resin system), and he never had a problem with it. He did indicate that upon first receiving it he was a little reluctant to begin accepting it, but later found it not to be a problem. They check for their effluent toxicity annually and it they have never failed a toxicity test. That waste stream is now being sent to Plant #2.

Both operators indicated that the town of Williamstown, KY has been handling leachate, for many years and it has not been an issue. They provided the name for Brian Gatewood, operator if we wanted to contact them.

Lexington, KY

In the afternoon Kevin and I visited the with Patrick McFadden Odor Control Specialist, James Worten, Plant Operations Supervisor at the Hickman WWTP, and Tiffany Rank, P.E., Municipal Senior Engineer. All were from the Fayette Urban County Government, Division of Water Quality. Assisting with this visit were vendors Gary Lubin, The Henry P. Thompson Company and Christian Garabaya of Parkson Company. Here is a listing of the sites visited.

LFUCG West Hickman WWTP:

- 1) Parkson OHxyPhogg mist system using for odor and/or grease control—OH radicals are made using small amounts of on-site produced ozone from water, air and electricity introduced using unique dispersion nozzles. The OH radicals have a very high oxidation reduction potential and oxidize the H₂S and other odors as well as dissolve grease
- 2) Siemens Zabocs biological odor control scrubber outfitted with post carbon tertiary scrubber. This type of unit uses microorganisms to biologically oxidize H₂S and other odors.

LFUCG Lower Cane Run Pump:

- 1) Siemens Low Profile odor control chemical scrubber using caustic and bleach to chemical oxidize H₂S and other odors
- 2) Siemens Bioxide chemical addition to the downstream pipeline for control of chemistry to prevent release of H₂S

KY Horse Park Pump Station:

- 1) Siemens small Bioxide System
- 2) Underground biofilter using maintained earth as the media

Some of these technologies could be used (scaled down) for use at Sellersburg. The main considerations for deciding which system is best suited is the level of H₂S to be treated and where it needs to be treated. It's my understanding that Kevin is now planning on using his Odalog to get a good handle of the H₂S levels throughout the Sellersburg system.

In summary, I think it was a very productive visit! I'll be uploading a bunch of pictures I took on the visit soon (I'll call Kevin and let him know how to download them). If you have any questions please call me.

Thanks!

Paul

**CLARK-FLOYD LANDFILL
LEACHATE TREATMENT DISPOSAL**

JOB NO: 10123

DATE: 12/6/11

CORRESPONDENCE



Jacobi, Toombs & Lanz, Inc.
Consulting Engineers & Land Surveyors

120 Bell Avenue - Clarksville, Indiana 47129
812-288-6646 - WWW.JTLENG.COM

SHEET

4

4 of 4



Indiana Department of Natural Resources

Michael R Pence, Governor
Cameron F. Clark, Director

April 13, 2016

Ken Alexander, Municipal Works Director
Town of Sellersburg
316 E. Utica Street
Sellersburg, IN 47172

**RE: Indiana Department of Natural Resources,
Deam Lake State Recreation Area WWTP (NPDES Permit No. IN0030147);
Acceptance of Domestic Wastewater Flow the Deam Lake WWTP by the Town of Sellersburg**

Dear Mr. Alexander:

Over the past several years we have been in discussions with you and Clark County's engineer, Jacobi, Toombs and Lanz, Inc. (JTL) regarding the acceptance of domestic wastewater generated from the operation of the Deam Lake State Recreation Area. It is our understanding that you are nearing completion of the connections to accept leachate generated from the operations of the Clark-Floyd Landfill. As we've discussed, our project is contingent on the landfill's force main and would connect to the Sellersburg system at that location.

To further this dialogue it is our understanding that Sellersburg needs to understand the Preliminary Effluent Limitations (PEL) that may be imposed by the Indiana Department of Environmental Management (IDEM) on the effluent from the Sellersburg's wastewater treatment plant (WWTP) from the introduction of this waste stream into the Sellersburg sewer system. When these discussions started back in 2013 JTL was in contact with Jerry Dittmer, IDEM, Section Chief, Municipal NPDES Permits Section. Mr. Dittmer has requested that any information regarding the project and characterizing the waste stream be provided so they can better perform their analysis and develop the PEL. This information is provided below.

Deam Lake State Recreation Area is owned by the State of Indiana and is managed by the Indiana Department of Natural Resources. The Deam Lake WWTP currently operates under NPDES Permit No. IN0030147. The plant is a Class I, 0.081 MGD treatment facility consisting of a grit chamber, a comminutor, two (2) aeration tanks with fine bubble membrane diffusers, two (2) final clarifiers, post aeration, ultra violet light disinfection and an effluent flow meter. A one-cell holding lagoon is also available for use, if necessary. The collection system is comprised of 100 percent separate sanitary sewers by design with no overflow or bypass. The plant receives typical domestic sewage and no industrial flows.

The effluent outfall is located at Big Run Creek at Latitude 38° 27' 46" N, Longitude 85° 51' 28" W. The receiving water has a seven day, ten year low flow ($Q_{7,10}$) of 0.0 cubic feet per second. The receiving stream is designated for full body contact recreational use and shall be capable of supporting a well-balanced warm water aquatic community in accordance with 327 IAC 2-1.

The current project proposal is that domestic sewage will be pumped from the proposed Deam Lake Pump Station through approximately 11,400 feet of force main (2-4" diameter) and discharge to the new pump station at the landfill. Please refer to Figure A. Deam Lake's contribution to the waste stream would consist of domestic sewage resulting from seasonal operational period, at an average daily flow of

approximately 3,500 gallons per day or 2.4 gpm. This flow rate is based on flow data obtained from Deam Lake's Daily Monitoring Reports.

After the pump station is installed at Deam Lake, IDNR plans to demolish the plant and lagoon and return the site to more environmentally beneficial and natural condition.

Based on our experience with small plants and part-time staff, they are prone to operational difficulties and costly maintenance. The Deam Lake WWTP is currently in good standing, but is no exception. The plant has received and responded to violation letters over its operational life. Including a violation letter on June 27, 2013 due to limited and poor access to its outfall. Having an automated pump station at Deam Lake would provide full 365 day - 24/7 hour operational coverage. It is believed incorporating this flow into the Sellersburg system with a full-time staff instead of treating it at the small Deam Lake WWTP into will provide cost savings and better meet permit requirements.

The effluent flow from the Deam Lake WWTP currently discharges to a zero flow stream. Sending the Deam Lake flow to Sellersburg, which does not discharge to a zero flow stream, would also provide a significant environmental benefit.

It is believed that by Sellersburg treating wastewater flows from the Deam Lake State Recreation Area that environmental and cost benefits would be immediately realized to the State of Indiana. This waste stream will also provide another source of revenue to the Town of Sellersburg and supports the contributions of this important DNR recreation facility to the Sellersburg and surrounding community.

Our interest is in working out a project and relationship with Sellersburg that would include acceptance of the Deam Lake wastewater and preferably one that would also include design and construction components of the project. We would also be interested in discussing options with Sellersburg to operate and maintain the Deam Lake internal wastewater infrastructure, but that is secondary to our primary interest.

We appreciate your consideration in this matter. If you have any questions or require additional information, please feel free to contact me at 317-232-4101 or dernst@dnr.IN.gov.

Sincerely,



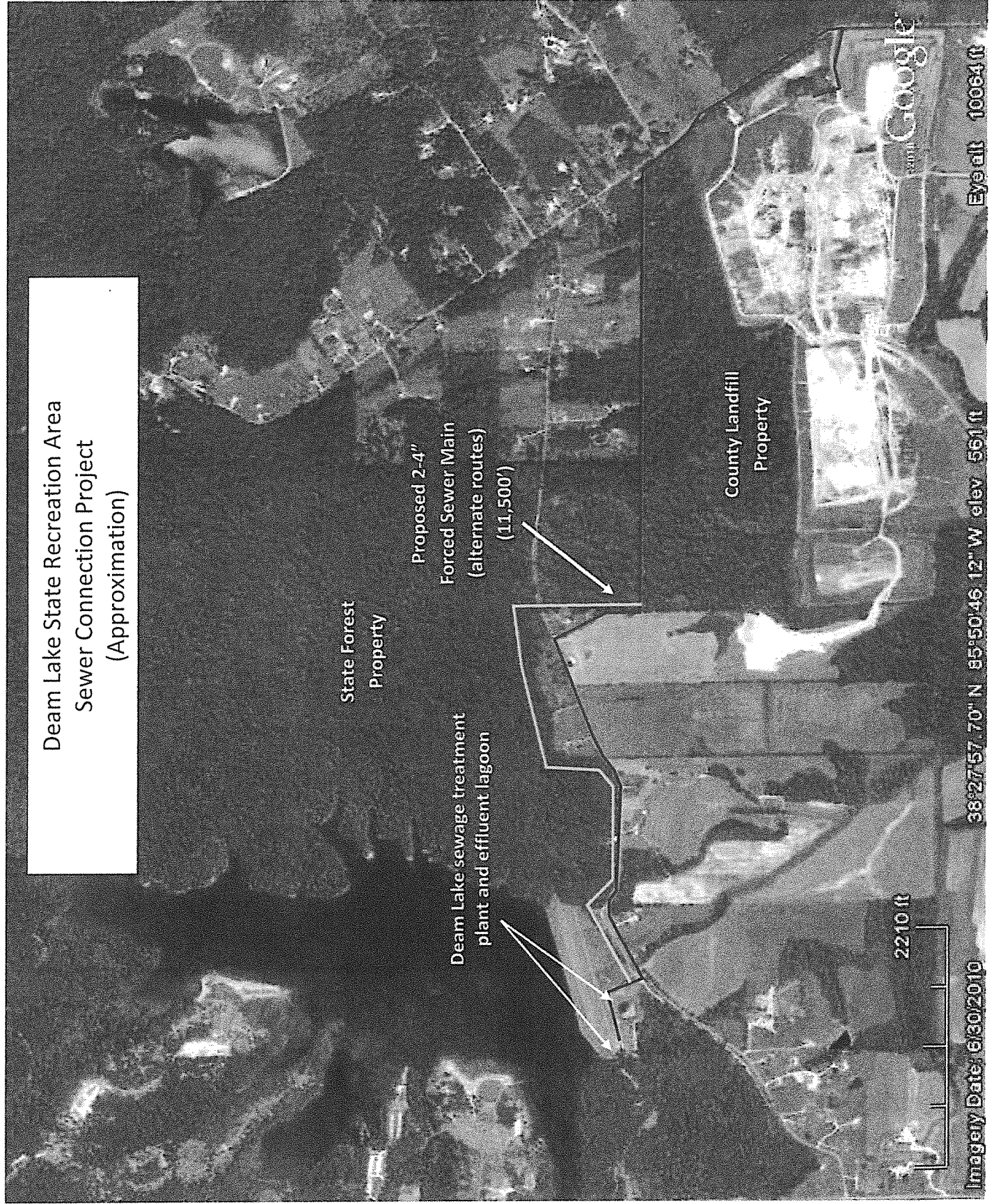
Dan Ernst
Assistant State Forester

Cc: file

Jack Coffman, Clark County Commissioners, President
Michael Harris, Jacobi, Toombs & Lanz, Inc., Vice President
Clark-Floyd Landfill

Attachment

Deam Lake State Recreation Area
Sewer Connection Project
(Approximation)



Sellersburg Ordinance Limits / Surcharge Thresholds vs. Leachate Laboratory Test Results

Regulated Parameter	Sellersburg, Indiana Code of Ordinances ¹		Leachate Laboratory Tests	% Above or Below Local Limits / Surcharge Threshold
	Local Limits 24-Hour Composite (mg/L, ppm)	Surcharge Monthly Average (mg/L, ppm)		
BOD ₅		200	64	-68%
TSS		250	168	-33%
Ammonia (as N)		30	460	1433%
Chloride			712	
α-Terpineol			0.018	
Benzoic acid			0.018	
p-Cresol			0.334	
Phenol	1.000		0.018	-98%
Arsenic	0.10		0.024 ²	-76%
Chromium	0.90		0.040	-96%
Zinc	10.000		0.070	-99%
Mercury	0.0160		0.000	-99%
Cadmium	2.0000		0.002	-100%
Selenium	1.0000		0.007	-99%
Copper	4.0000		0.017	-100%
Silver	4.1000		0.006	-100%
Lead	0.0200		0.010	-50%
Nickel	12.0000		0.062	-99%
pH			7.380	

Notes:

- 1) Chapter 54, Industrial Pretreatment
- 2) Not tested under current IWP Permit. Average taken from 2011.

Clark-Floyd Landfill Leachate Pump Station & Force Main

Project History and Update

Sellersburg Town Council
May 18, 2016

Landfill History

- Started – June 1970
- State Operating Permit Issued – January 1975
- Vertical Amendment Approved – November 1988
- Section 5 Approved – November 1988
- Section 6 Approved – 1997
- C&D Regrading Plan Approved – 2008 (Increased Capacity 500K tons)
- Approximately 543 Acres Within Facility (Including Borrow Areas)
- Approximately 172 Acres Approved for Waste Placement
- Minor Mod for Wedge Approved – 2008
- Major Mod for Vertical Expansion Approved – July 2012
- Minor Mod for Subsurface Barrier Wall Extension Approved – December 2012

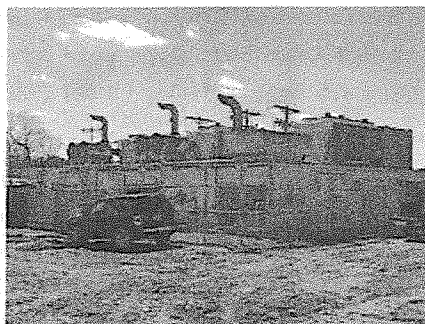
Environmental Compliance

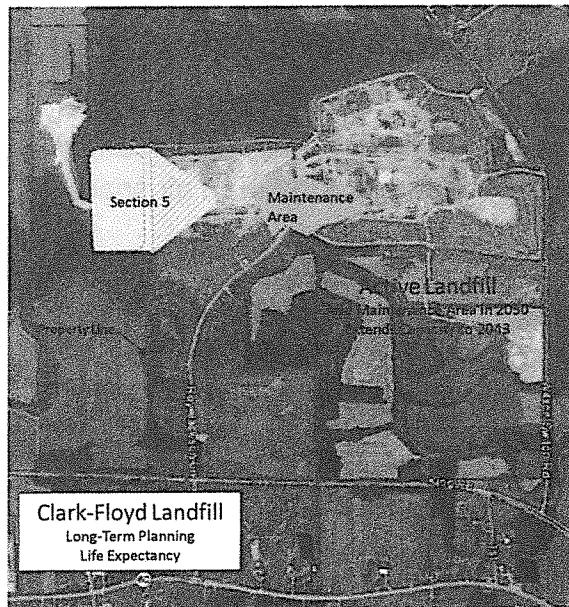
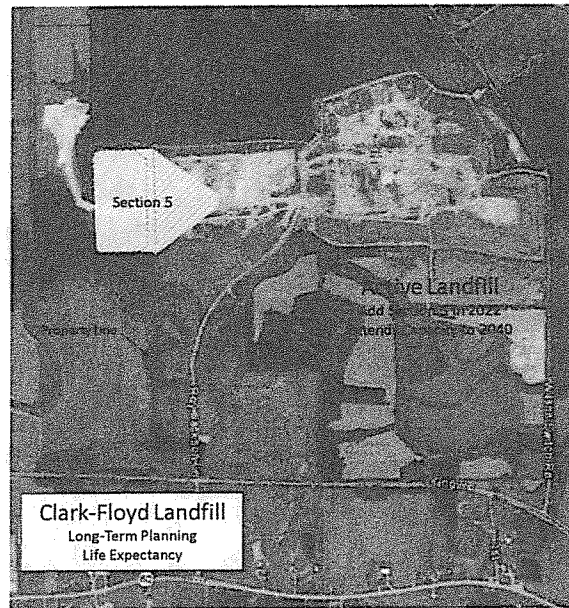
- Air
 - Gas Collection
 - Gas-to-Energy (Hoosier)
 - Testing (surface emissions, EGMP, etc.)
- Leachate
 - Collection
 - Disposal
- Groundwater
 - Testing
- Stormwater
 - Testing



Landfill Gas-to-Energy

- Owned and operated by Hoosier Energy (2006)
- Capability to generate up to 3.5 MW
 - Each MW can supply power for ~ 600 homes
- Hoosier purchases LFG from the county
- Has helped finance multiple system expansions





**CLAIM-FLOYD LANDFILL
ENVIRONMENTAL MITIGATION MAP**

Environmental Permitting

- USACE
 - Wetlands
- IDEM
 - Wetlands
 - Water
- IDNR
 - Floodway

Barrier Wall Project



- Town Council Briefed December 2011
- Town Council Briefed 2014
 - Updated NPDES Permit
 - Trial Period Hauling: No issues
- Town Permit Concerns
- Town Income / Costs

Leachate Pump Station and Force Main Project – NPDES Permit

Saltwaterburg plans to accept landfill leachate during an interim period where it will evaluate the impact of the leachate on the operations and effluent of its POTW. This period is anticipated to begin immediately and last to near the end of October 2014. During this time Saltwaterburg proposes that the sampling requirements highlighted in green below would be in effect. Saltwaterburg plans to decide on or before the end of October 2014 if they will accept landfill leachate on a long-term basis. If accepted, there is a proposal that all the requirements in the NPDES permit would be in effect.

34. In 1974, the number of cases of disease was approximately 100,000.

Engraving by J. G. Thompson

Leachate Pump Station and Force Main Project – History

Town of Sellersburg Treatment Cost Estimate
Based on 2012 Actual Leachate Generation

5/12/13

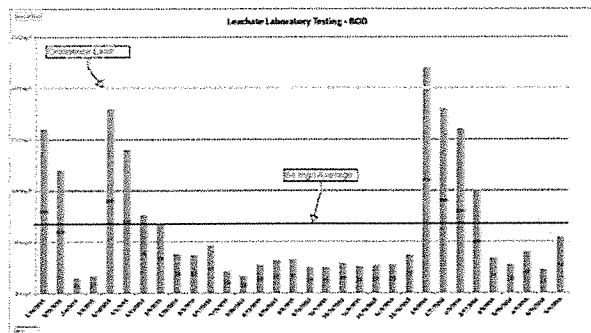
Treatment Fee

	Amount (gallons)	Rate (\$/gal)	Annual Amount	Monthly Amount	Reference
Leachate Generated for Off-site Treatment (gallons)	6,531,477	\$2.88/gal	\$23,577	\$1,885	Town Ordinance 58-116 \$3.61/1000 gallons
		Rate (\$/lb)			
Surcharge for Ammonia (225 ppm Avg - 50 ppm = 225 ppm)	6,531,477	\$2.60/lb	\$1,354		58-115 Town Ordinance 54-126 Item C
Total			\$25,931	\$2,172	

Tap-Fee (One-Time)

	SFE Units of 300 GPD	Rate (\$/300 gal)	Amount	Reference
One-Time Tap Fee	19.65	\$2,600	\$155,085	Sewer tap fee is based on commercial use outside the town's municipal boundary. Single Family Equivalent (SFE) \$2,600 per 300 gallons of daily flow. Town Ordinance 58-114 Item D. Flow is based on Actual 2012 off-site leachate generation. Tap fee is adjusted after one year of actual usage.

Leachate Pump Station and Force Main Project – Updated Testing



Leachate Pump Station and Force Main Project – Where Are We Now?

- Design
- Land Acquisition
- Council Approval
- MOU
- Contract with Operator (CFL, LLC)
- Schedule
- IDNR

