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REPORT:
NJ DEP FAILURES AT FENIMORE LANDFILL
ROXBURY TOWNSHIP, NJ

May 21, 2014

Revision 0

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Introduction

This report was prepared for Senator Smith and Assemblywoman Spencer, in response to and in support of their May 14, 2014 letter to Governor Christie requesting an investigation of the NJ Department of Environmental Protection (DEP) regarding the potential mismanagement of the Fenimore Landfill Solar Project, and subsequent cleanup in Roxbury Township, Morris County, NJ. The information contained herein was assembled by the Roxbury Environmental Action Coalition (R.E.A.C.T.) from documents that are publicly available. Due to limitations of outreach and data gathering, this report is a small sample of available information and should only be used as a starting point for the investigation. It is further requested that a formal public hearing be held to obtain additional discovery. Please note that, due to time limitations, additional content will be provided via a revision at a later date.

Executive Summary

Part 1 - Overview

For the past two years, the Residents and Township of Roxbury have suffered irreparable harm to their health, quality of life, town reputation, and property values from the mismanagement of the Brownfield to Solar Project at the former Fenimore Landfill in Roxbury Township, Morris County, NJ. This project was negotiated, approved, and carried out under the exclusive oversight of the DEP. Documents and records obtained for this report show that the Fenimore project was troubled from the beginning. Almost as soon as the work began, various problems arose, yet the DEP failed to step in and take control. The DEP's lack of initial regulatory rigor and unwillingness to effectively respond to the failing project in a timely manner allowed the Fenimore Landfill project to spiral into the disaster that it has become.

Evidence in this report suggests that:

- The DEP knowingly approved a convicted felon to operate this project.
- The Brownfield designation of the Fenimore Landfill was questionable.
- The possible detrimental impacts on the Roxbury community were not given consideration.
- The project was approved despite known deficiencies in design plans, permitting issues and serious concerns from stakeholders.
- The DEP knowingly approved C&D fines, material that has been well-known for decades to cause difficult-to-control H₂S emissions, to be dumped on a dormant site with no environmental controls in place and no plans for such controls.
- The DEP failed to notify residents of toxic gas releases, and failed to release environmental test results that were not favorable.
- The DEP publicly discounted residents' health impacts, refused help from the EPA, and failed to involve the CDC/ATSDR.
- The DEP shut down the gas mitigation system on holidays without public notice.

- The DEP failed to include on-going operating and maintenance costs in its side by side budget of remediation options, and exaggerated the costs and hazards of excavation, which raises the suspicion of bias.
- The DEP secretly used fear mongering tactics to lobby neighboring towns to support its capping plan. The DEP's gas dispersion model used is suspected to be exaggerated by a factor of 1,000.
- The DEP-proposed remediation plan has an insufficient design basis and ignores leachate control, potential well-water contamination and other contaminants that may be present in the material that was accepted.
- The DEP-proposed remediation plan has no regard for community impact and ongoing quality of life.
- The DEP-proposed remediation is governed by the Emergency Order signed into law by Governor Christie in June 2013 and allows for no oversight and minimal permit requirements. The remediation is not consistent with N.J.A.C. 7:26E or the NJ Highlands Act Regional Master Plan.

Part 2 - Community Impact

Approximately 950 school children live within one mile of the Fenimore Landfill site and hundreds of residents live within a few hundred feet. The site has, and, will continue to have for many years to come, the potential to emit H₂S (hydrogen sulfide) concentrations in excess of acute and chronic health standards set by the EPA and the Agency of Toxic Substances and Disease Registry (ATSDR). The site is adjacent to residential backyards and is not fenced in from the public. Also, area schools have been affected with exposures that have triggered health-based alert levels, and have caused cancellation and rescheduling or relocation of outdoor activities including township sports leagues. According to the Roxbury Township Superintendent of Schools, exposure has also affected students taking NJ standardized tests.

Many residents and children in the community are experiencing health issues such as headaches, nausea, nosebleeds, anxiety, insomnia, respiratory problems, and increased asthma attacks since the H₂S problem started. Health effects from long-term exposure to H₂S are unknown, especially with regards to children. Despite the claims of the DEP,

the Department of Health (DOH), and Governor Christie, the ATSDR has declared the site a public health hazard.

The rotten-egg odors which are the tell-tale sign of elevated H₂S levels have resulted in a large impact to quality of life, enjoyment of property, town reputation, and property devaluation. In 2011, Roxbury was named one of the top 100 communities for young people by America's Promise Alliance. Now, many residents are leaving the community because of personal impacts and the deteriorating reputation of the township. A report from the NJ Association of Realtors shows a decline in property values for Roxbury compared to neighboring towns and the rest of Morris County.

The environmental effects of the Fenimore Landfill are concerning. Groundwater breakthrough and leachate on the site have been tested by the NJDEP and were found to contain levels of arsenic, aluminum, and lead in excess of NJDEP ground and surface water standards. Hundreds of residents living adjacent to the site depend on well water. Some residents have lost the use of their residential wells due to infiltration of sulfur compounds which caused an odor unbearable to even shower with. Other wells in the area are starting to present problems with contamination, casing failures, and dry out, all suspected from recent site activity.

The site is located in a sensitive geologic area that is protected by the NJ Highlands, adjacent to the Morris Canal, and also contains two first-order tributaries classified as Category One, Trout Production waters. These streams ultimately flow into Ledgewood Pond/Drakes Brook which, in turn, flow into waterways that provide drinking water for millions of NJ residents. No protective liner exists underneath the newly deposited material at the landfill, allowing a potential pathway into the groundwater.

This site and its effects on the community is now far worse than it was before this "capping" project started. The DEP-proposed remediation forces the residents to live with large stacks continuously spewing smoke in the middle of their community. It also results in the likely potential for future unhealthy residential toxic gas exposure should the mitigation equipment need maintenance or repair, which has happened several times already.

The site has no ability to generate revenue so no owner will ever have the motivation or ability to keep the cap and the gas mitigation system maintained and operating in perpetuity. Since the DEP doesn't own the site, they can't guarantee they will have control of it for the foreseeable future. These potential future problems and risks have

destroyed Roxbury's reputation as a safe, peaceful, and rural community to live and raise a family.

Part 3 - Why Investigation is warranted?

The DEP has failed to address and abate odors and gas emissions for 11 months, as evidenced by the ongoing odor complaints to the DEP call hotline. The DEP has allowed a nuisance and health threat to continue since their takeover of the site in June 2013, with no end in sight. In addition, there are no guarantees as to the effectiveness of the proposed mitigation/capping design.

The DEP continues to focus their efforts on taking this failed project out of the public light and convincing politicians they are making positive progress. The DEP has taken half-measures and trial-and-error solutions for the cleanup with the potential of making a bad situation worse. The DEP refuses to perform an environmental assessment of the site including core sampling, which is necessary in order to determine and engineer the best remediation option. The DEP is currently in litigation with the landfill owner which may be preventing them from conducting necessary additional environmental testing and may be biasing their remediation approach to one that doesn't best suit the application or the community.

The DEP has ignored comments and concerns from residents, the Township, and various environmental groups in the past and present. The DEP appears to lack the motivation to properly remediate this site and maintain transparency with the stakeholders and the public.

Under the circumstances stated above, and given the DEP's past and continuing failure to protect the environment and public health, an investigation should be conducted on an expedited basis to prevent any further harm to the environment and the public. Any debate on whether or not this investigation is granted should favor in light of the public welfare, public health, and preservation of the environment. In addition, immediate oversight of the DEP is necessary and demanded by the residents.

Section 00: Community Impact

00.1 Senate Hearing Testimony – May 30, 2013: Written testimony from residents, township officials including police chief, school superintendent, health officer, mayor, and township manager stating the impacts this failed project has had on the community since 2012.

Section 1: The NJ DEP knowingly allowed a convicted felon to purchase and operate Fenimore Landfill

The DEP failed to properly vet SEP or Richard Bernardi, thus allowing a convicted felon to operate Fenimore Landfill in contravention of New Jersey state law. Mr. Bernardi was convicted of conspiracy to bribe in 1996 relating to his ownership of a sanitation equipment company that had leased sanitation equipment to Newark's Sanitation Division. N.J.A.C. 7:26 created the A-901 licensing program, which requires background checks for any party seeking to enter and operate in the waste disposal industry in the state. No documentation has been discovered that shows that the DEP or the State's Attorney General's office conducted any investigation into Mr. Bernardi's criminal background.

However, it is evident that the DEP was aware of and dismissed this criminal history, despite state law requirements. During the November 14, 2011 public information meeting held in Roxbury regarding the proposed closure plan, a member of the public inquired as to Mr. Bernardi's criminal past. According to the DEP's meeting minutes of that meeting, Robert Confer, the Bureau Chief of the Bureau of Landfill and Hazardous Waste Permitting, and Cindy Randazzo, the Director of the Office of Local Government Assistance, stated that background checks were not required. Further, in a November 2011 e-mail exchange, Mr. Bernardi sent Ms. Randazzo, a link to a New York Times article detailing his conviction. Ms. Randazzo replied that she didn't "pay attention to anything but the facts."

In December 2011, the NJ Commission of Investigation released a report titled "Industrious Subversion: Circumvention of Oversight in Solid Waste and Recycling in New Jersey." The report summarizes the lack of proper investigation and oversight by

the agencies charged with ensuring that the A-901 process is followed. The report clearly states that the DEP is charged with investigating those in the waste disposal industry, including those managing a landfill. There is no evidence available that the DEP asked Mr. Bernardi to submit to the A-901 process or sought to vet him or SEP despite his own admission to the DEP.

Documentation:

- 1 . 1 NY Times article dated October 30, 2001 and titled "After Prison, Former Contractor Disputes Case."
- 1 . 2 DEP Fenimore Landfill Public Information Meeting Minutes dated November 14, 2011.
- 1 . 3 E-mail exchange between Richard Bernardi and Cindy Randazzo dated November 18-21, 2011.

See also:

<http://www.nj.gov/dep/dshw/resource/26sch16.pdf> N.J.A.C. 7:26 Solid Waste Regulations

<http://www.state.nj.us/sci/pdf/Solid%20Waste%20Report.pdf> NJ Commission of Investigation report titled "Industrious Subversion: Circumvention of Oversight in Solid Waste and Recycling in New Jersey."

Section 2: The designation of the Fenimore Landfill as a Brownfield was questionable

The DEP's handling of the Brownfield designation for the Fenimore Landfill site illustrates a pattern of the agency's lack of knowledge of its regulatory duties and its willingness to cut corners in order to aid Mr. Bernardi in his scheme. In 2005, and in prior years, site assessments were conducted on the Fenimore Landfill, which included visual inspections as well as lab testing of soil and water samples. In the 2005 "Immediate Environmental Concern Assessment Report" prepared by The Louis Berger Group and Sadat Associates on Fenimore, the conclusion was that the site did not pose a public health threat and did not require an immediate remediation. Between 2005 and 2011, no further dumping or other use was done on Fenimore.

Despite this existing analysis, the DEP granted the Fenimore Landfill site a Brownfield designation on August 18, 2011. The designation was based on an assessment study conducted by Matrix New World Engineering, Inc., the same company which Mr. Bernardi employed throughout the process of reopening and operating the Fenimore Landfill. The Matrix study was dated July 27, 2011, and updated the day before the designation was granted, meaning the DEP took only three weeks in reviewing this important matter.

A review of DEP communications shows a pattern that the DEP intended to assist Mr. Bernardi in any way necessary to attain Brownfield status and the Highlands Waiver. Ruth Foster of the DEP Office of Permit Coordination and Environmental Review e-mailed Mr. Bernardi in February 2010 stating that "[DEP] is trying to figure out where it can/if we can waive present rules that we have." Also in February 2010, Robert Confer of the DEP sent a letter to Mr. Bernardi stating simply that he believed that Fenimore qualified as a Brownfield. Mr. Confer then e-mailed Chris Ross of the Highlands Council in May 2010 asking if that letter was sufficient for Mr. Bernardi to attain the necessary Highlands Redevelopment Waiver. A further May 2010 e-mail from Ruth Foster illustrates that those at the DEP involved with this project were unaware of their own agency's processes. This bungling is also evident in the e-mail and attachments to Mr. Bernardi's June 2011 e-mail to Cindy Randazzo of the DEP. Mr. Confer of the DEP even

went so far as to ask Mr. Bernardi his advice on how to the Brownfield rules could have been improved to facilitate his application process.

Once Matrix submitted the July 2011 report on behalf of SEP, the DEP approved the Brownfield designation overnight. In his August 2011 e-mail, Richard Reilly of the DEP went so far as to provide revision points to Matrix's report to limit issues to which the Highlands Council could possibly object, such as "highlands open water boundaries, buffers, stream relocation." Despite the questionable history of the Fenimore site, including prior assessments that the site was not an immediate concern, the DEP seemingly rubber-stamped SEP's request for Brownfield designation so that the project could be exempted from the environmental protections of the Highlands Act.

Documentation:

2.1 The Immediate Environmental Concern Assessment Report on the Fenimore Sanitary Landfill dated November 2005 prepared by The Louis Berger Group, Inc. and Sadat Associates, Inc.

2.1.1. Conclusions and Recommendations section of the Immediate Environmental Concern Assessment Report.

2.2 August 18, 2011 letter from Richard C. Reilly, Manager of the Bureau of Inland Regulation of the DEP to Richard Bernardi, stating that the DEP had designated the Fenimore Landfill as a Brownfield.

2.3 February 17, 2010 e-mail from Ruth Foster (DEP) to Richard Bernardi.

2.4 May 12, 2010 e-mail from Robert Confer (DEP) to Chris Ross (Highlands Council).

2.5 May 20, 2010 e-mail from Ruth Foster (DEP) to Chris Ross (Highlands Council).

2.6 February 17, 2011 e-mail from Robert Confer (DEP) to Richard Bernardi.

2.7 June 6, 2011 e-mail from Richard Bernardi to Cindy Randazzo (DEP).

2.7.1. March 5, 2010 letter from Ruth Foster (DEP) to Richard Bernardi clarifying the Brownfield designation process.

2.7.2. February 11, 2010 e-mail from Robert Confer (DEP) to Richard Bernardi stating that Fenimore could be designated a Brownfield.

2.8 August 18, 2011 e-mail from Richard Reilly (DEP) to Richard Bernardi and various DEP staff regarding the designation of Fenimore as a Brownfield.

Section 3: Project Approval: Deficient Plans and Failure to Address Concerns

The Fenimore Landfill project has been suspect from its inception considering the lack of due diligence by the DEP and summary SEP planning and reaction in all facets. An untried private sector company run by a known felon was drafted to complete a complex state regulated landfill remediation because of potential reduced public costs and new executive policy. The DEP ignored the initial and developing facts presented to it by allowing the project to proceed when it was based on poor financials that relied on volatile-price landfill material and crashing solar markets in order to provide SEP revenue to complete the capping operation. Over the objections and questions from many municipal agencies, public officials, and Roxbury residents, the project was allowed to continue by the DEP and court system even after multiple non-compliances, funding problems, and lack of transparency with the public.

Documentation:

- 3.1** 2001 H2M Report containing Fenimore Landfill detailed history and complete planning for publicly funded closure
- 3.2** Letter returning Fenimore jurisdiction from the Division of Remediation Management & Response to the Division of Solid & Hazardous Waste due to lack of immediate environmental concern
- 3.3** Berger Group 2005 Immediate Environmental Concern Assessment showing Fenimore was not an immediate concern despite major historical contamination
- 3.4** Email from Gary Sondermeyer of the DEP to Richard Bernardi of SEP suggesting he find the “Environmental Transition Team” Report prepared for Governor Christie and his Executive Order #2 (Red Tape Task Force) in order to pursue a “different way” of future permitting to provide incentives for “green projects”

- 3.5** Email from Ruth Foster of the DEP to Richard Bernardi of SEP and Robert Confer of the DEP showing confusion over Highlands Act remediation jurisdiction and waivers for redevelopment. (Exemption #15 vs. Part 81k)
- 3.6** Email from Ruth Foster of the DEP to Richard Bernardi of SEP discussing pending legislation regarding solar projects on impervious ground such as capped landfills
- 3.7** Email from Gary Sondermeyer of the DEP to Richard Bernardi of SEP after complaints of delays and being behind schedule. Sondermeyer says he will help with the “logjam” and suggests Bob Martin as the new Commissioner of the DEP is a “strong manager” supportive of renewable energy projects, “the likes of which we never had”
- 3.8** Email from Robert Confer of the DEP to Richard Bernardi of SEP stating a cursory Brownfield designation for the Fenimore site
- 3.9** Email from Robert Confer of the DEP to Richard Bernardi of SEP stating there are no specific rules for pre-1982 closed landfills. He states post- 1982 rules are normally applied but draft regulations to standardize closures are past SEP's timeline.
- 3.10** Morris County Soil Conservation District non-compliance letter from Joe Dunn to SEP
- 3.11** Email from Richard Bernardi of SEP to Vincent Mazzei of the DEP complaining about the need to remediate Fenimore's leachate catch basin and due to cost overruns needs to keep the cost down because the remediation is privately funded by SEP
- 3.12** Email from Richard Bernardi of SEP to Robert Confer of the DEP complaining about the following post-1982 technical requirements that require delineation of the landfill boundary due to considerable depth of historic fill. SEP would like drilling depth delineation waived.
- 3.13** Morris County Soil Conservation denial of soil erosion plan
- 3.14** Email from Roxbury Mayor Jim Rilee to Cindy Randazzo of the DEP regarding lack of communication with the township

- 3.15** Email from Cindy Randazzo of the DEP to Roxbury Mayor Jim Rilee copying Morris County Soil Conservation District issues with the execution and planning of the Fenimore project
- 3.16** Email from Richard Bernardi of SEP to Cindy Randazzo of the DEP illustrating the collapse of the solar market and his inability to find a solar contractor for the project
- 3.17** Email from Richard Bernardi of SEP to Joe Dunn of Morris County Soil Conservation district regarding incomplete application for a soil permit
- 3.18** Email from Richard Bernardi of SEP to Robert Confer of the DEP suggesting he needs a material friendly ACO like Malanka Landfill in order to finance the project
- 3.19** Email from Richard Bernardi of SEP to Robert Confer of the DEP saying design delays are delaying the project with the crashing fill and solar markets
- 3.20** Email from Roxbury Mayor Jim Rilee to Cindy Randazzo of the DEP regarding closure plan deficiencies
- 3.21** Robert Confer DEP deficiency letter
- 3.22** 2011 email from Richard Bernardi of SEP to Robert Confer of the DEP expressing the need to approve the Fenimore closure plan or a solar contractor cannot be signed and the project will have no revenue stream for funding with the solar market crashing
- 3.23** Highlands Council review and public comments questioning the viability of the Fenimore project
- 3.24** Email from Richard Bernardi of SEP to Cindy Randazzo of the DEP complaining that Joe Dunn of Morris County Soil Conservation District is being unfair with regulations
- 3.25** Roxbury Township 2011 letter with questions about the Fenimore project and stating the inadequacies of the DEP public meeting

- 3.26** 2011 Email from Ruth Foster of the DEP to Richard Bernardi of SEP with Fenimore project questions from Senator Anthony Bucco
- 3.27** 2011 Fenimore project questions from Senator Anthony Bucco
- 3.28** Email from Bashar Assadi of Birdsall to Richard Bernardi of SEP and Ruth Foster of the DEP with draft answers to Fenimore project questions from Senator Anthony Bucco
- 3.29** Bashar Assadi of Birdsall draft answers to Fenimore project questions from Senator Anthony Bucco
- 3.30** 2011 email from concerned Roxbury resident to the DEP
- 3.31** 2011 letter from concerned Roxbury resident to the DEP
- 3.32** Email from Ruth Foster of the DEP to Richard Bernardi of SEP with questions from a Roxbury resident
- 3.33** Email from Dawn Funk of the DEP to Robert Confer of the DEP with a request from Richard Bernardi to waive the solar contract requirement of the ACO due to crashing markets even though it is SEP's planned projected source of revenue to fund the Fenimore closure
- 3.34** Letter from Bashar Assadi of Birdsall requesting waiving the solar contract requirement of the ACO
- 3.35** Email from Thomas Bruinooge representing SEP asking for waving of the escrow requirement of the ACO
- 3.36** Letter from Thomas Bruinooge representing SEP asking for waving of the escrow requirement of the ACO because it restricts SEP operations
- 3.37** Email from Richard Bernardi of SEP regarding again waiving the solar contract requirement of the ACO
- 3.38** Letter from Bashar Assadi of Birdsall requesting waiving the solar contract requirement of the ACO

- 3.39** Email from Bashar Assadi of Birdsall to Robert Confer of the DEP explaining the difficulty with closing a solar contract.
- 3.40** Letter from Bashar Assadi of Birdsall explaining the difficulty with closing a solar contract and SEP's failing efforts
- 3.41** Email from Ruth Foster of the DEP to other DEP members forwarding the project planning and viability concerns of Richard Bernardi of SEP
- 3.42** Email from Ruth Foster of the DEP to Jane Kozinski of the DEP forwarding Richard Bernardi of SEP's concerns that the DEP is reserving certain fill materials for landfills other than Fenimore
- 3.43** Email from Bashar Assadi of Birdsall to Robert Confer of the DEP stating that SEP cannot obtain a loan to cover the cost of closure and material management unless the ACO is revised to remove the escrow requirement
- 3.44** Email from MaryAnne Goldman of the DEP to Richard Bernardi of SEP regarding methane presence at Fenimore and accepting water treatment plant residuals with higher than allowable levels of arsenic
- 3.45** Letter from Robert Confer of the DEP regarding ongoing issues with SEP and denying their request to accept of arsenic laden water treatment plant residuals
- 3.46** Email from MaryAnne Goldman of the DEP to Richard Bernardi of SEP regarding a modified financial plan due to poor planning
- 3.47** 2012 Letter from Robert Confer of the DEP regarding the revised SEP financial plan deficiencies and lack of addressing Fenimore project viability concerns

- 3.48** Letter from Roxbury Township citing SEP planning deficiencies

- 3.49** Email from Jane Kozinski of the DEP to Richard Bernardi of SEP discussing viability of the Fenimore project and scheduled meeting with the Governor's office

- 3.50** 2012 email from Jane Kozinski of the DEP to Richard Bernardi of SEP terminating the ACO and closure plan

- 3.51** Letter from Jane Kozinski of the DEP to Richard Bernardi of SEP stating the intent to terminate the closure plan due to SEP financial plan non-compliance

- 3.52** Ruling from Jane Kozinski of the DEP to Richard Bernardi of SEP stating the intent to terminate the ACO and closure plan due to SEP financial plan non-compliance

- 3.53** Letter from Jane Kozinski of the DEP to Richard Bernardi of SEP stating the intent to terminate the ACO due to SEP financial plan non-compliance

- 3.54** Letter from Roxbury Manager Chris Raths to Robert Confer of the DEP asking the department to not extend the ACO with SEP

- 3.55** Email from Christofer Kaufhold of the Northern Bureau of Water Compliance & Enforcement to Bashar Assadi of Birdsall regarding the lack of leachate control at Fenimore until the project Phase II which was delayed

- 3.56** Email from Robert Confer of the DEP to various recipients discussing slope grading issues at Fenimore and the ongoing hydrogen sulfide gas emissions and mitigation

- 3.57** Email from Robert Confer of the DEP to Richard Bernardi of SEP regarding ongoing questions and concerns with SEP's Fenimore Phase I remediation

- 3.58** Letter from Roxbury Township to Robert Confer of the DEP regarding ongoing questions and concerns with SEP's Fenimore Phase I remediation
- 3.59** Email from Richard Bernardi of Sep to Sarah Gentile of the DEP regarding Green Acres solar incentive to fund the Fenimore project
- 3.60** 2013 letter from Stephen Pearlman representing SEP asking that the Fenimore project be put into a Green Acres queue for review regarding any grants, incentives, or benefits that the SEP Fenimore project could use to fund remediation even with the project's solar aspect being unfeasible
- 3.61** Email from Richard Bernardi of SEP to Catherine Tormey of the DEP confirming the recusal of Deputy Commissioner Irene Kropp to to conflicts of interest and return of SEP escrow funds.
- 3.62** Letter from Catherine Tormey of the DEP to Richard Bernardi of the DEP confirming recusal of Deputy Commissioner Irene Kropp
- 3.63** Letter from Richard Bernardi of SEP to Deputy Commissioner Irene Kropp of the DEP requesting termination of the escrow requirements in the closure plan documents and return of all currently held SEP escrow funds. The reason being unfair unfair DEP treatment and that the requirement is detrimental to his cash flow needed for operation and closure activities

Section 4: Allowance of C&D Material

The recent disposal of ground up construction and demolition debris (C&D fines) containing wallboard has resulted in odors and toxic gas emissions from the Fenimore Landfill.

Gypsum wallboard is made from calcium sulfate. When the wallboard becomes wet, the sulfate dissolves and can be converted to H₂S through anaerobic (in the absence of oxygen) digestion. Ground gypsum board, which is commonly found in C&D

screenings/fines, creates more surface area from which the sulfate can dissolve, which results in a greater generation rate of H₂S than whole pieces of wallboard.

Documentation:

- 4.1 Material Acceptance Protocol:** The DEP explicitly allowed C&D fines to be dumped at Fenimore Landfill as part of the Administrative Consent Order (ACO) and Material Acceptance Protocol (MAP). C&D fines have been known for years to cause impossible to control H₂S emissions and odors, and the USEPA and Agency of Toxic Substances and Disease Registry (ATSDR) have been involved in many cleanups and superfund sites due to this very issue.
- 4.2 Report: Odor Control Issues at Fenimore Landfill:** This report was created by the DEP in response to a request by the Superior Court, Morris County, NJ. Section 3 indicates that the DEP is well aware of the problematic nature of C&D fines due to their involvement in the remediation of Warren County Landfill from 2007-2011. The Warren County Landfill accepted large quantities of C&D material and experienced similar problems with H₂S emissions and odors.
- 4.3 C&D came from DEP approved Recycling Centers:** Received volume reports immediately prior to the first odor complaints in November, 2012, show that the source of the C&D material was DEP approved recycling centers.
- 4.4 thru 4.7 Sulfur Content Test Reports, as required, for some of the C&D material**

The DEP knowingly allowed C&D fines to be dumped near a residential area on an abandoned site with no environmental controls in place. The DEP approved the project with no finished design plans in place for a gas mitigation system, and no requirements for a system of the complexity of what is currently required to abate the odors. Even if SEP contributed the required amount to the escrow account, it would not of been enough to fund the current cleanup.

Documentation:

- 4.8 DEP asks SEP to accept different materials - C&D materials were problematic**
- 4.9 Letter from Attorney General approves C&D fines to be accepted**
- 4.10 DEP response to Senator Bucco, 1/13/2012:** Response to question #3 states that the materials that will be accepted are not hazardous and will not further

contaminate the landfill. Residents and public officials expressed concerns, but the DEP responded with false assurances.

4.11 NJ Landfill Liner Requirements: This document summarizes NJ landfill liner requirements. If the C&D material dumped at Fenimore was taken to a grass roots facility, a liner would be required. Special requirements also pertain to environmentally sensitive areas like flood fringe areas, wetland buffer areas, and watershed areas for high quality streams. The Fenimore site qualifies for all of these.

Section 5: The EPA and Sandy Material

On December 20, 2011, approximately one month after the first complaints were called into the NJDEP complaint hotline, the NJDEP called EPA Region 2 and requested help with air monitoring at the Fenimore Landfill. By December 24, 2011 Roxbury Township had requested air monitoring from the NJDEP. Numerous e-mails and phone calls were made from numerous departments at the EPA between December 20, 2011 and January 9, 2012. On December 28, 2011 Luis Lim from the NJDEP e-mailed Chris Rath, Roxbury Township Manager, stating that no monitors would be on-site in the foreseeable future due to paperwork. On January 9, 2012 NJDEP Senior management, for unknown reasons, decided not to pursue help for monitoring from the EPA. No additional follow-up communication was found.

Hurricane Sandy material at the Fenimore Landfill was acknowledged from various people including Wolfgang Satchel, the DEP signatory on the ACO between DEP and SEP.

Documentation:

- 5.1** E-mail concerning DEP's placement of air monitors
- 5.2** DEP communication to Roxbury Township dated December 30, 2011
- 5.3** EPA Sandy-related material e-mails
- 5.4** EPA Fenimore e-mails
- 5.5** Roxbury Township request for air monitors dated December 24, 2011

Section 6: DEP Odor Complaint Investigations in 2013

Beginning in late 2012 and throughout 2013, Roxbury residents were directed to call the DEP's odor complaint hotline (1-877-WARN-DEP) whenever they detected the H₂S odors characterized by a rotten-egg smell. Given the large number of calls, the DEP instituted a protocol of sending out investigators carrying hand-held H₂S monitors. When a resident called, and the DEP responded, the investigators would only take a reading if the individual investigator smelled the H₂S odor inside the caller's home. Only if the investigator subjectively smelled the odor would a reading be taken with the hand-held monitor and then an official complaint would be written out only if the monitor detected certain levels of H₂S. Despite occasions where the H₂S odors were pervasive in a neighborhood, readings were not taken because the investigator subjectively did not smell the odor. Suddenly and without explanation, the DEP changed its protocol and investigators were allowed to take readings only if the odors were detected outside a property, and again, only if the investigator subjectively smelled the odor. Under either protocol, there were repeated instances where DEP investigators arrived at callers' homes without the monitoring equipment necessary to take readings and write official reports.

Once the DEP took control of the Fenimore Landfill under the Emergency Order of June 26, 2013, the DEP discontinued its protocol. Although residents continued to smell the H₂S and continued to call in complaints, the DEP stopped responding and sending investigators to take readings. Since, the DEP has taken over, residents have continued to call the DEP hotline but the DEP has not carried through with its protocols.

In February 2014, H₂S odors were strong and prevalent. Despite the fact that the H₂S monitors that have been installed in Roxbury were taking high readings, the DEP has continued to deny that H₂S smells and their corresponding health effects are a continuing and dangerous problem for Roxbury residents. Larry Ragonese, the DEP Press Director, has stated that these high readings are “glitches” though residents have reported smelling the H₂S odors at times corresponding to these high readings. Since the DEP took over the Fenimore site, no investigations into the continuing harmful emissions of H₂S have occurred.

Documentation:

6.1 July 16, 2013 e-mail discussing DEP protocols

- 6.2** Resident e-mail regarding in-house odor dated December 18, 2012
- 6.3** Resident e-mail regarding DEP inaction dated January 12, 2013
- 6.4** Resident complaint e-mail dated March 19, 2013
- 6.5** DEP response to complaint dated December 30, 2012
- 6.6** NJ.com article dated February 11, 2014 regarding

Section 7: Methane Gas: Problems Hidden

Methane landfill gas (LFG) has always been and will continue to be a dangerous problem at the Fenimore site. It has been lost in the more recent issue of hydrogen sulfide gas emissions due to C&D materials, gypsum wallboard, and Hurricane Sandy waste, but is no less of a concern. Methane is given off as organic wastes naturally decay within landfills and ranges from combustible to highly explosive at various concentrations. The DEP emergency order to remediate hydrogen sulfide does nothing to mitigate present and future methane gas. A different type of LFG collection system is and will always be necessary even if the recently added SEP materials are removed alleviating the need for an industrial sulfur removing thermal oxidizing scrubber.

Large volumes of methane were detected at old and new gas collection wells and venting flares in 2012 at levels well above combustible limits. The nearby residents were not warned of high levels of methane present and the associated dangers. Methane gas can seep into basements and if concentrated can explode from sources such as the pilot light of a home furnace. Since the emergency order allowing the DEP to take over the Fenimore site, they, SEP, and Roxbury Township have not communicated the dangers of methane for fear of public backlash or designed a public emergency response plan for the community should fire or explosion occur at Fenimore.

Once initially encountered, proper remediation of methane should have been a focus but was ignored by the DEP because SEP required C&D materials and other contaminated soils to continue re-grading operations intended for the supposed solar project that can now never be implemented. These suspect materials have led to the hydrogen sulfide issue which further complicates LFG mitigation. Due to insufficient DEP actions, residents' well being has been put at risk without their knowing. Highlands redevelopment and private remediation of a legacy landfill that is the State's ultimate responsibility took precedence over the DEP's, SEP's, and Roxbury Township's responsibilities to the community.

Documentation:

- 7.1.** June 2010 Email from Robert Confer of the DEP to Richard Bernardi of SEP stating the early need for delineation of LFG
- 7.2.** June 2010 Email from Robert Confer of the DEP to Richard Bernardi of SEP stating atmospheric variables during LFG testing and ATSDR requirements

- 7.3.** Email from Robert Confer of the DEP to Bashar Assadi of Birdsall requesting the physical location of a well with high methane levels and requesting an immediate retest
- 7.4.** Bashar Assadi of Birdsall response to Robert Confer of the DEP stating that gas well with high methane is isolated and poses no danger
- 7.5.** May 25th 2012 Fenimore LFG well maps
- 7.6.** Email from Robert Confer of the DEP to Bashar Assadi of Birdsall requesting the addition of two new wells near the well with high levels of methane. Comments that the landfill is producing large amounts of LFG and questions if a methane gas system will be installed in Phase I of the project.
- 7.7.** Bashar Assadi of Birdsall response to Robert Confer of the DEP stating that the high levels of methane gas are a concern and that testing should be done at the site boundary near residents' homes.
- 7.8.** Email (truncated) from Robert Confer of the DEP to Bashar Assadi of Birdsall asking for urgent additional LFG site testing, testing at "the top of the hill" near the residents' homes, and on residents' private properties if able. DEP authorizes Saturday work due to potential dangers. Requests SEP stop work within a 200-foot radius of the area with high methane levels due to present danger.
- 7.9.** Email (truncated) from Robert Confer of the DEP to Bashar Assadi of Birdsall stating the levels of methane now being found at the property boundary near homes are significant and corrective measures are needed immediately. Requests methane testing for the entire Poet's Peak neighborhood. Requests permanent in ground monitoring wells and a LFG migration study. Requests immediate installation of LFG collection system on the Phase I area.
- 7.10.** DEP proposed gas monitoring well design schematic
- 7.11.** Email from Robert Confer of the DEP to Richard Bernardi of SEP setting a meeting to discuss methane testing in the Poet's Peak neighborhood
- 7.12.** Email from Deputy Attorney General Robert Kinney to the DEP, SEP, and Roxbury

Township to discuss the methane issue along with asbestos presence. Residents were never notified of these issues and their potential danger

- 7.13.** Agenda for 8/1/12 Kinney-DEP-SEP-Roxbury Township meeting
- 7.14.** Email (truncated) from Bashar Assadi of Birdsall to Elias Art of Keller & Kirkpatrick engineering with methane test results.
- 7.15.** Test results showing methane present at combustible levels
- 7.16.** Fenimore site map showing test locations, none taken in Poet's Peak neighborhood as DEP requested
- 7.17.** Test results showing methane present at combustible levels
- 7.18.** Email from Robert Confer of the DEP to Richard Bernardi of SEP with direction to develop an Operational and Environmental Action Plan regarding the presence of methane and asbestos.
- 7.19.** DEP proposed gas monitoring well design schematic
- 7.20.** Letter from Robert Confer of the DEP to Richard Bernardi of the SEP with detailed instructions for action regarding the presence of methane and asbestos at Fenimore.
- 7.21.** List of residents living near landfill area of concern with maps of the Fenimore site and surrounding community. Roxbury Township provided 39 parcels to be tested for methane presence, the results of which are unknown. DEP in conjunction with Roxbury Township and the DOH requests SEP submit a proposal for Residential Confined Space Testing, subslab methane testing, and volatile organic compound analysis testing, the results of which are unknown. DEP orders methane migration testing and permanent LFG monitoring wells in the Poet's Peak neighborhood, the outcome of which are unknown.
- 7.22.** Letter from Matthew Fredericks of Kessler & Associates representing SEP to Judge Diane Wilson asking the DEP, SEP, and Roxbury Township to engage in a settlement conference and for sanctions against the DEP for not cooperating with SEP. Contains previous meeting minutes.

- 7.23.** Email from Richard Bernardi of SEP to Gina Conti and Mary Siller of the DEP stating that he is the only person that makes decisions regarding what is done at the landfill.
- 7.24.** Previously attached Kessler & Associates letter with additional correspondence and Birdsall Services Group methane mitigation plan.
- 7.25.** Email from Richard Bernardi of SEP to Robert Confer of the DEP asking for addresses of residents in the community and full backing of DEP regarding DEP ordered off-site testing. The email addresses methane only and no mention of possible risks to surrounding residents.
- 7.26.** Email from Robert Confer of the DEP to SEP and DEP project stakeholders regarding a future Fenimore site visit and recent conference call. A DEP approved LFG collection system was agreed upon 8/6/11 before the hydrogen sulfide appeared. A Professional Engineer needed to review the system to assure adequacy of the original system for both collection and treatment of methane and hydrogen sulfide. Revision of the system was possibly needed with additional collection wells near Poet's Peak. The LFG treatment system design was incomplete as of 3/26/13 pending LFG qualitative and quantitative analysis. The outcome of these efforts are unknown due to litigation and the emergency order for hydrogen sulfide mitigation preventing on site testing by Roxbury Township or SEP.

Section 8: Asbestos: Problems Not Addressed

Asbestos was found at Fenimore in July 2012. The material's current disposition is unknown or if it made it permanently into the landfill. Asbestos can be deposited as small pieces or finely ground up and contained in contaminated fill soil. The proper handling of asbestos material conflicts with hydrogen sulfide gas mitigation. Asbestos contaminated material and soil should be kept wet to deter airborne dust while hydrogen sulfide producing gypsum wallboard should be kept dry to avoid the anaerobic bacteria that produce the gas. This makes proper remediation of Fenimore a questionable issue in the future. Since it is not known if asbestos was present prior to SEP activities and the DEP will not allow core or soil testing of the Fenimore site, it is impossible to know exactly how much asbestos may be on the site and the best way to remediate any asbestos contamination alongside the hydrogen sulfide mitigation.

Residents were never notified by responsible parties of these issues.

Documentation:

- 8.1** Report showing the presence of asbestos tile from a DEP regulated facility and the subsequent improper handling by SEP
- 8.2** Email from Bashar Assadi of Birdsall to Richard Bernardi of SEP in response to asbestos presence in material from a DEP regulated recycling center
- 8.3** Email from Deputy Attorney General Robert Kinney to the DEP, SEP, and Roxbury Township to discuss the asbestos issue along with methane presence. Residents were never notified of these issues and their potential danger.
- 8.4** Agenda for 8/1/12 Kinney-DEP-SEP-Roxbury Township meeting
- 8.5** Email from Robert Confer of the DEP to Richard Bernardi of SEP outlining an action plan in response to the presence
- 8.6** Letter from Robert Confer of the DEP to Richard Bernardi of SEP outlining the asbestos response plan including material handling, methods to protect workers, and control dust that could escape into the surrounding community
- 8.7** List of residents living near landfill area of concern with maps of the Fenimore site and surrounding community
- 8.8** Letter from Matthew Fredericks of Kessler & Associates representing SEP to Judge Diane Wilson asking the DEP, SEP, and Roxbury Township to engage in a settlement conference and for sanctions against the DEP for not cooperating with SEP. Contains previous meeting minutes.
- 8.9** Email from Richard Bernardi of SEP to Gina Conti and Mary Siller of the DEP stating that he is the only person that makes decisions regarding what is done at the landfill.
- 8.10** Previously attached Kessler & Associates letter with additional correspondence and Birdsall Services Group asbestos mitigation plan.
- 8.11** Email from Robert Confer of the DEP to Richard Bernardi of SEP requesting follow

up of the asbestos issue.

- 8.12** Email from Richard Bernardi of SEP to Robert Confer of the DEP asking for addresses of residents in the community and full backing of DEP regarding DEP ordered off-site testing. The email addresses methane only with no mention of asbestos or possible risks to surrounding residents.

Section 9: Contaminated Soil Dumped

Materials brought to Fenimore were known to industry professionals to be toxic or raise nuisance concerns yet the DEP ACO allowed them to be dumped in the middle of a residential community. It was the DEP's responsibility to regulate the recycling centers and providers of the soil fill material accepted by SEP. The deficient ACO allowed water treatment plant residuals and processed dredge material that have been shown even after decontamination to be toxic to the environment and ground water. Many of these materials were allowed to come from "Areas of Concern" which include sites and rivers contaminated with hazardous waste and other pollutants (NJAC 7:26E-1.8 Definitions).

Materials accepted at or to be delivered to Fenimore have been found to exceed the limit for arsenic, lead, and possibly other toxic substances. Eagle Recycling of North Bergen, NJ and Allocco Recycling of Brooklyn, NY (Both DEP regulated facilities) have been known to have issues with providing materials that exceed legal contamination limits and have been frequent suppliers to SEP. Since the DEP will not currently allow core or soil testing of the Fenimore site, it is impossible to know exactly what material SEP accepted and how contaminated the site and its soil really are.

Documentation:

- 3/17/11 DEP and Roxbury Township Meeting minutes discussing closure standards are not as restrictive for a pre-1982 landfill. Robert Confer was named as DEP representative responsible for reviewing all aspects of the SEP closure plan.
- 1/13/12 Email from DEP's Lucille Santitoro to Richard Bernardi containing DEP responses to Senator Bucco's Fenimore questions.

- DEP responses to Senator Bucco's Fenimore questions showing allowance of questionable materials
- 2/21/12 Email from Bashar Assadi of Birdsall to DEP's Robert Confer with one of SEP's many requests to modify the ACO.
- Test results from on Fenimore site showing arsenic limits exceeded in water treatment plant residuals
- Letter from Bashar Assadi requesting the DEP allow water treatment plant residuals exceeding the limits for arsenic.
- Arsenic test results table
- 7/3/12 test report showing contaminated soil dumped at Fenimore exceeded the limits for lead

Section 10: DEP Water Tests: Never Released

The DEP conducted testing in and around the Leachate Pond in January and July, 2013. Both times, test results showed levels of Lead, Arsenic, and Aluminum that exceed NJ DEP surface and ground water standards. These tests results were not released to the public and were obtained via an OPRA request.

Documentation:

10.1 DEP Leachate testing 1/2013: Lab test results

10.2 Site Map – Leachate Pond: Note the location of the leachate pond. It overflows during heavy rains and runs into Ledgewood Pond / Drakes Brook which, in turn, flow into water ways that provide drinking water for millions of NJ residents. In addition, no liner exists underneath the newly deposited material, allowing a potential pathway into the groundwater and area private residential wells. Many residents living adjacent to the site depend on well water, and some residents are starting to have problems with contamination, casing failures, and dryout, that

are believed to be due to recent activity on the site.

A DEP factsheet issued on August 16, 2013 stated that sampling of leachate and the leachate pond found some pollutants above surface water quality standards, however downstream surface water sampling did not demonstrate any off-site impacts. However, the overflow of leachate downstream is highly dependent on rainfall. An accurate assessment of water quality cannot be predicted unless testing is done frequently, which it has not.

Section 11: Formaldehyde Levels: Ignored by the DEP

React performed independent air testing on 10/1/2013. One of the tests was EPA Method TO-11A for Formaldehyde.

Formaldehyde is an intermediate product in the decomposition process of C&D material. Exposure effects include nose bleeds, which have been well documented within the community, and it is a known carcinogen.

Documentation:

11.1 Air Testing Results 10/1/2013: Lab results show formaldehyde concentrations were detected approximately 100 times the DEP long term health benchmark and in excess of other rural municipalities. DEP has not tested for formaldehyde or responded to these test results.

11.2 C&D Material Generates Formaldehyde: DEP January 7, 2013 report shows how formaldehyde is generated from decomposing C&D material.

Section 12: Fiscal Presentation by Bob Martin: Misinforms Senate Budget Committee

Please listen to Bob Martin's short presentation on Fenimore Landfill to the Senate Budget Committee 4/29 @ 2PM

http://www.njleg.state.nj.us/media/archive_audio2.asp?KEY=SBAB&SESSION=2014

Senator Bucco asks Martin for a landfill update @ 35:25 in the senate hearing and the response lasts about 5 minutes.

Martin informs them of the following:

1. Plans exist to transform the site into a community park for a benefit to the residents.

This is not feasible not possible because:

- The DEP doesn't own the land and is only authorized to mitigate the gas emissions under the emergency order for the phase 1 area which accounts for under 20 acres (less than a third) of the entire original landfill
- The remainder of the site consisting of the old landfill (50 acres +) needs attention/capping before any public use could even be considered, and to date, no plans exist to remediate that area
- Due to the delicate nature of the geomembrane liner the DEP has proposed using for the cap (instead of hard clay), the land can't be redeveloped in any way.
- If the land is even under consideration for any future public use, shouldn't the material be sampled to identify the contamination that is present so proper remediation could be implemented? This is something the DEP is and has been unwilling to do.

2. Martin further informs the Senate Committee that the DEP gas dispersion model shows that excavating would potentially endanger 30 adjoining communities. He states that money was not the deciding factor in selecting a remediation option, it was the safety of the community.

It appears that the DEP is ignoring Mr. Masi's analysis of their gas dispersion model (See Section 23) which shows they overstated H₂S emissions during excavation by a factor of at least 1,000. If this model is corrected, it may actually show that excavating is the best option. If safe excavation is possible, it undisputedly eliminates future risks of well water contamination, toxic air emissions should the mitigation equipment fail, need repair, or go down due to a power outage, and also restores quality of life and property values due to the absence of smoke stacks and smoke plumes in residential areas, and negates the need for residents and schools and community sports to be at the mercy of air quality monitors for the foreseeable future. It also limits the total cost to the upfront excavation itself.

3. Bob Martin failed to disclose at the Senate Hearing that, in addition to the capital cost of the capping option the DEP is moving forward, the operation and maintenance will cost up to 4.5 million dollars per year for the foreseeable future. In the long run, capping may cost more than excavation and could greatly exceed it if there are future problems with the site that will require further remediation or modification of the gas mitigation system. Since the land has no ability to generate revenue, no one would ever want to own it, leaving operation and maintenance of the cap and gas mitigation system the sole responsibility of the State, indefinitely. Another problem is that the State doesn't own the site, so can't guarantee they will maintain control.

The Township's environmental expert prepared a report that summarizes operating and maintenance costs of the DEP proposed capping plan. These are the costs that the DEP failed to disclose in their presentation of remediation options at the public meeting.

Documentation:

12.1 Estimated O&M Costs – A summary of O&M costs for the DEP proposed remediation. This remediation not only forces the safety of the residents to be at the mercy of man-made machinery, but may end up costing more than excavation in the long run.

In addition, according to the Township's expert, the scrubber will require up to 60,000 gallons of water per day out of the municipal supply (~22 million gallons per year), and four large "16 wheeler" tanker trucks per day to remove wastewater from the facility that will need to drive on narrow residential roads, some with no sidewalks among playing children.

The report goes on to address reliability issues with the DEP installed mitigation system.

It appears that Bob Martin has misinformed the Senate Committee of the true facts regarding the cleanup.

Documentation:

12.2 Email from a resident: Email to Senator Bucco regarding Bob Martins false claims to the Senate Committee

Section 13: DEP Public Meeting: Failure, 3/11/2014

The DEP held a public meeting on March 11, 2014 to present their proposed Remediation plan. The DEP made firm decisions without listening to concerns and comments from the public and township, and without incorporating any community involvement. The DEP presentation appeared to be biased toward their proposed plan. In addition, the DEP failed to address serious deficiencies that were asked during the public comment period.

There are still many unanswered questions and serious concerns with the DEP proposed remediation plan. The Emergency Order the DEP is operating under is allowing them to proceed with no oversight, no required testing, no transparency, and no input from all stakeholders. If this remediation followed NJ7:26E – Technical Requirements for Landfill Remediation or was consistent with protocols of USEPA superfund remediations, community involvement, transparent environmental testing, and assurance that the remediation option selected would be beneficial to the community would all be part of the process.

Documentation:

- 13.1 Roxbury Mayor and Council call NJ DEP landfill remediation plan inadequate:** Press release from Roxbury Township
- 13.2 Senator Bucco: Residents Deserve More from NJ DEP:** Press release from Senator Bucco expressing disappointment that the DEP made decisions and finalized plan without listening to the public's comments or incorporating community involvement.
- 13.3 Roxbury Township Resolution dated September 10, 2013:** Implores Governor Christie to support their request to hold a public meeting with the DEP and DOH.
- 13.4 Smelly Roxbury Landfill: Senator, township, owner, residents all fuming over done-deal plan**
- 13.5 State: We're not delaying plan to cover smelly Roxbury Landfill:** DEP states they are not delaying plan despite concerns from residents and the Township.
- 13.6 Residents Questions to the DEP:** A residents unanswered questions and concerns

as a result of the DEP public meeting.

- 13.7 Governor misleading the public:** Governor's comments at a town hall meeting regarding Fenimore Landfill were inaccurate. A resident demands answers.
- 13.8 Outstanding Questions from a Resident:** A resident's questions and concerns to the DEP as far back as October 2013 are still unanswered. DEP has not responded to the last email dated 3/31/2014
- 13.9 DEP Bullyies media after they expose DEP deficiencies regarding Fenimore Landfill**

Section 14: DEP Air Dispersion Map / Fear Mongering

Documentation:

- 14.1 DEP Air Dispersion Model:** The DEP created this air dispersion map to demonstrate the potential hazards of excavating to over 30 municipalities surrounding Roxbury Township. Ironically, this map was not shared with Roxbury Township/Residents. The DEP met secretly with neighboring municipalities to lobby and fear-monger them into supporting the DEP capping plan.
- 14.2 On Incompetence, Flagrant, Dishonesty NJDEP:** This report was prepared by a resident engineer/scientist and shows that the DEP air dispersion model that was shared with neighboring communities has exaggerated H2S emissions by a factor of at least 1,000. It also shows the email chain and refusal of DEP to address these deficiencies or correct them.
- 14.3 Letter to Mayor Rilee and Township Councilpersons:** The author of the report summarized the situation to Township Officials, asking for support. The Township has demanded the DEP provide a response. The gross errors in this air dispersion model suggest the DEP has a biased agenda regarding the remediation and may not be selecting the best option for the community. The DEP is also using this model to exaggerate the hazards of the excavation option.

- 14.4 Residents email to DEP:** This email to the DEP demands a response on why the DEP is secretly meeting with these neighboring townships when they won't even come to Roxbury to address resident's concerns.
- 14.5 Roxbury Redoubt: Christie's DEP Has Become A Haven For Incompetent Hacks:** Editorial on the subject
- 14.6 The State DEP is Trying to Silence Critics, NJ Sierra Club:** Letter outlining Christie's/DEP's agenda to bully and intimidate people whenever someone disagrees with them or what they want to do.

This information further supports that the DEP remediation plan, starting back from evaluating possible remediation options, their effectiveness, costs, and potential long term impacts and risks to the community must be reviewed in its entirety, with all documentation, studies, measurements, etc., by an independent, qualified professional organization, not previously involved with Fenimore and not currently under any contract with the State of NJ. This organization must be enlisted to provide a complete review of ALL Fenimore data and remediation options. This organization shall provide input on individual plan merits and deficiencies as well as relative merits of plausible alternative solutions; The NJDEP must not be allowed to continue work on Fenimore until such input is received, approved by all stakeholders, and adequately incorporated into the final remediation plan. Also, the NJDEP should not be allowed to continue work on any revised plan without significant oversight, preferable from the USEPA.

Section 15: Denial of Soil Testing

The NJ DEP claims that they've done no soil testing on the landfill property. They claim that, according to the emergency order that gave the DEP control of the site, their only task is to abate H₂S odors. The DEP has refused to allow soil testing by Roxbury Township's independent contractors even though the emergency order states the following:

"The Township of Roxbury and its contractors shall have full access to the Landfill to monitor all hydrogen sulfide control measures and to obtain test samples for the purpose of environmental monitoring."

On March 31, 2014 Roxbury Township filed legal action in State Superior Court seeking an order to show cause after the DEP denied the township's request to perform independent testing of soil samples. Soil samples would be drawn from new gas-extraction wells being dug on the site by the DEP.

As part of the DEP arguments, Deputy Attorney General Robert Kinney suggested that obtaining soil samples would be dangerous and would cause delays with the completion of the new wells because of issues with necessary protective gear (clothing and equipment).

Superior Court Judge Robert J. Brennan decided that soil sampling would disrupt the installation of the wells and could delay the project. On April 2nd, he denied Roxbury's request to obtain the samples and set a follow-up hearing for April 21st. Township officials chose not to pursue the matter on April 21st, and no protective measures were observed on the site during the actual digging of the wells.

Since it remains unknown what was actually dumped at the site, how can a closure plan and proper remediation be implemented?

Documentation

- 15.1** Email exchange between Kerry Pflugh and Roxbury's Mayor and Town Council dated August 9, 2011.
- 15.2** State of New Jersey Department of Environmental Protection Emergency Order dated June 26, 2013.
- 15.3** NJ.com. "Roxbury takes legal action against DEP to test soil from new wells at Fenimore Landfill." March 31, 2014.
- 15.4** Daily Record. "Roxbury sues for Fenimore soil samples." April 2, 2014.
- 15.5** NJ.com. "Judge denies Roxbury's bid to test soil from DEP's wells at landfill." April 2, 2014.
- 15.6** Daily Record. "Roxbury denied Fenimore request to test soil samples." April 3, 2014.

15.7 New Jersey Hills. “Roxbury to request dump soil sample data from State: OPRA request to be filed.” April 9, 2014.

See also:

<http://roxburynj.us/ArchiveCenter/ViewFile/Item/2484>, Roxbury Township press release titled “Roxbury Township files legal action to force the N.J. DEP to allow soil testing at the Fenimore Landfill.” March 31, 2014

Section 16: DEP failed to alert public when equipment wasn’t operating on holidays and also when SO₂ releases exceeded EPA standards due to equipment failure

Documentation:

- 16.1 DEP Fact Sheet – SO₂ Health Standards:** The DEP installed gas mitigation system uses a thermal oxidizer to burn H₂S which in turn generates sulfur dioxide, or SO₂. Every pound of H₂S destroyed generates about two pounds of SO₂. SO₂ is a toxic gas that poses similar health effects and threats as H₂S. SO₂ is also federally regulated by the USEPA under the Clean Air Act. The EPA has set a health standard to be protective of public health of 75 ppb over 60 minutes. The ATSDR has set an acute minimum risk limit of 10 ppb for SO₂. See page two of the DEP factsheet for further reference.
- 16.2 SO₂ Monitor Reading 4/7/2014:** On 4/7/14 the scrubber malfunctioned resulting in SO₂ emissions into the community in excess of the health standards outlined above. Monitor 13 is located in a residential community. The DEP never alerted the public.
- 16.3 SO₂ Monitor Reading 4/2/2014:** Another scrubber malfunction on 4/2/2014 resulting in elevated SO₂ emissions into the community. Monitor 6 is located in a residential community. The DEP never alerted the public.
- 16.4 NJ.COM article titled “System meant to protect Roxbury from toxic gas releases different toxic gas.”:** Summarizes events and lack of DEP action and response despite resident’s concerns and toxic exposures.

- 16.5 Email from a resident to DEP:** Resident asks the DEP why the community was not alerted of the scrubber failure and resulting potentially harmful SO₂ emissions..
- 16.6 Email from a resident to DEP:** Resident can't get answers from the DEP
- 16.7 Email from a resident to DEP:** Resident demands to know why the DEP is not operating or staffing the mitigation system on holidays, and not alerting the public that it will be down.

Section 17: Governor Christie's Public Statements

The public statements Gov. Christie has made regarding the Fenimore Landfill situation create a pattern that suggests that Gov. Christie has been willfully misinformed by the DEP and DOH. At a town hall meeting in Long Hill, NJ on February 26, 2014, a Roxbury resident questioned Gov. Christie about the DEP's actions with respect to Fenimore. Gov. Christie stated that he was kept up-to-date on the situation by the DEP and DOH. Gov. Christie insisted that there were no health hazards caused by the landfill. However, a February 4, 2014 letter from the DOH to Roxbury Township detailed the health hazards to residents chronically exposed to high levels of H₂S. According to DEP testing, the average levels of H₂S far exceeded the standards set by the EPA and ATSDR for chronic exposure. At the town hall meeting, Gov. Christie also stated that the DEP was in constant communication with the Township and residents. However, at that point the DEP was not in communication with either the Township or residents despite frequent letters and calls.

At the April 9, 2014 town hall meeting in Fairfield, NJ, Gov. Christie made statements to the effect that residents' calls to truck out the toxic substances that were brought in by SEP over the past two years were actually requests to truck out all the fill at Fenimore, which had accumulated since the 1950s. Gov. Christie also stated that removing the SEP material would expose a wide range of communities to toxic substances. As Section 14 of this Report explains, the DEP's models purporting to show the possible endangerment of nearby communities grossly misinterprets data and is based on inaccurate modeling.

Privately, the Township has directly appealed to Gov. Christie for assistance, including asking that the DEP direct federal Hurricane Sandy relief funds to clear out the Sandy-

related materials that were brought into the landfill by SEP. No response has ever been received.

Documentation:

- 17.1** August 10, 2013 from Roxbury Township Mayor Fred Hall to Gov. Christie requesting assistance with alleviating the H2S from Fenimore Landfill.
- 17.2** Roxbury Township Resolution 2013-295 calling on the DEP to obtain federal Hurricane Sandy relief funds to resolve the Fenimore Landfill problem.

Section 18: DEP's public response to criticism avoids the real issues

In a published letter to the Roxbury Register on April 17, 2014, Jeff Tittel of the NJ Sierra Club criticized the DEP for its handling of the Fenimore Landfill project and resulting problems, and its proposed solution of capping the site. Mr. Tittel described at length the issues with the DEP's proposed capping. The DEP Press Director Larry Ragonese's response letter continued to obfuscate the facts of how the DEP has been presenting its dispersion map to nearby towns and how the proposed geomembrane liner will work. Unbiased, accurate research has shown that the DEP's presentations to nearby towns are exaggerated and not based on scientific data, as explained in Section 14 of this Report. Further, the DEP's proposed capping is inappropriate for a site such as Fenimore, where naturally occurring streams will thwart the proposed liner's ability to maintain the SEP materials dry in order to abate the release of H2S. SEP's continued public show undermines attempts to properly deal with the problems at the Fenimore Landfill.

Documentation:

- 18.1** Letter to the Roxbury Register by Jeff Tittel dated April 17, 2014.
- 18.2** Letter to the Roxbury Register by Roxbury resident Kathy Hart dated May 2, 2014.
- 18.3** Letter to the Roxbury Register by Larry Ragonese (DEP) dated April 25, 2014.

Section 19: Excavate vs Capping

There has been much debate regarding the remediation options the DEP has proposed: Cap the material in place and install a gas mitigation system or fully excavate the H₂S generating material that was dumped post 2011. The DEP's reports are undoubtedly biased toward capping. The experts hired by Roxbury Township claim that not enough information is available to make a sound recommendation. What truly is the best option?

Importance of Environmental Testing and Sampling

To insure success for any site remediation, environmental testing is warranted to obtain a proper design basis, set cleanup goals, and benchmark/trend future conditions. In the case of Fenimore, there is a critical missing piece of information that may be the deciding factor between remediation options: *sulfur content*.

The average sulfur, or sulfate content of the material is of great importance because it determines how much gas has the potential to be generated and for how long. Approximately every 100 tons of landfilled sulfate has the potential of producing 35 tons of H₂S. In every report issued and every calculation performed to date, sulfate content has been an assumed estimate.

Sulfur or sulfate content would be obtained by core sampling in different locations in a grid pattern at different depths to create a 3D "map" of where concentrations of wallboard are within the pile. This data would help determine the "worst offending" areas of the site with regards to H₂S generation and also areas that perhaps are not generating much H₂S at all. This information, along with flowrate and concentration data gathered from the test wells, would help model the H₂S generation more accurately which would result in the following:

- A better assessment of how long the gas mitigation / smoke stacks would need to be in place.
- A better estimate of the year to year operational cost to run the gas mitigation system
- The worst case community impact should the gas mitigation equipment fail catastrophically

- The "real" potential hazards should the material be excavated
- The true excavation cost considering a significant portion of the material may be inert "dirt."

Even though there are additional factors that are necessary for H₂S generation, such as moisture and proper pH, knowing the amount of sulfate present would satisfy one variable in the equation and result in a more accurate calculations.

Unfortunately, the DEP has rejected such testing for reasons that are unknown.

Capping in Place

Capping in place is the current DEP proposed solution. It involves a gas mitigation system consisting of collection wells, piping, and a blower that route the gases to a thermal oxidizer where the H₂S is combusted and converted into SO₂. Then, an industrial scrubber removes the SO₂ from the gas effluent that exits into the atmosphere via a smoke stack. Once this system is fully installed, the DEP states that the remainder of the site will be covered with a geomembrane "tarp-like" liner to keep rainwater out and attempt to slowly dry the material, which will reduce the gas generation over time. The liner/cap will be covered with soil and a vegetative layer to prevent erosion. Storm water management and leachate treatment/control will also have to also be addressed. It's unknown if the DEP will or can address these items with the remediation authority the Emergency Order allows.

Pro's to Capping in Place

- Smaller upfront (capital) cost. Roxbury Township expert report estimates \$13,855,000 initial cost.
- Less truck traffic compared to excavating. DEP report estimates that up to 6300 truck trips may be required to import the soil for re-grading and final cover.
- The material will not be disturbed
- Other C&D Landfill Facilities have been successfully capped.

Con's to Capping in Place

- Annual Operating & Maintenance costs exist for an indeterminate amount of time. The cap will have to be maintained, inspected, and repaired, if needed,

indefinitely. Roxbury Township expert report estimates the first year operating cost will be \$4,505,000 and will decrease as the gas generation is reduced.

- Reliability issues, repairs, natural disasters, etc, may cause downtime of the equipment which could expose the public to recurring toxic gas emissions.
- Modifications and upgrades may be required to the system due to changing influent landfill gas flow to ensure effective treatment. This will cost additional money.
- Air and water monitoring will be required for years to come.
- Potential for groundwater / well contamination if the cap is damaged allowing rainwater in, or if contaminants leach from beneath the pile into the water table or debated streams that run through the site since no underliner exists.
- The scrubber is estimated to require up to 50,000 gallons of water per day out of the municipal supply and several tanker trucks per day of waste water removal off the site for the foreseeable future.
- This site is not an operating C&D Landfill so doesn't have the ability to generate revenue. It will be difficult to find a property owner so O&M will have to be paid by others.
- The state doesn't currently own the landfill. Future control of the site will be determined by litigation
- Smoke stacks near residential communities and the existence of air quality monitors and environmental protocols in schools, as long as the site has the potential to generate H₂S gas, may affect property values.
- Stress and anxiety of living at the "mercy" of the equipment operating to keep the public safe.
- Future funding of the site may be dependant on State budgets and financial strength of the next administration.
- Future redevelopment not possible with a geomembrane liner.

Excavation

Excavation would essentially involve "staged" removal of the material and transport it to a facility that already has environmental controls in place to handle such material. The current gas mitigation system would be operational during the staged removal effort and would be taken down once the operation was complete.

Once all the material is removed, the site would most likely still need to be capped with clean soil and a vegetative layer. A basic methane venting system may also be required.

There has been much debate over the potential hazards that this operation may pose to the public. Without knowing the sulfate content of the material, it is impossible to determine the magnitude or potential absence of such hazards as all calculations and air models are currently assumption based and anecdotal.

Excavation logistics would require it's own thorough, independant study and professional report, which hasn't yet been commissioned by any party. The material would most likely be transported in closed container trucks and only a small portion of the site would be opened up at time to minimize emissions. Consistent with advice from the Township's expert report, this activity would be best suited during the fall, winter, and spring months, when temperatures are lower and result in low H2S gas generation.

Pro's to Excavation

- Permanent solution, not dependant on future funding, owership of the site, or operating/maintaining industrial equipment or a cap.
- One time, upfront cost
- Eliminates the potential for unhealthy toxic gas exposure to the community
- Reduces the potential for groundwater / well contamination
- Ongoing air monitoring not required
- Completely restores Roxbury to pre-2011 peaceful, safe, and uncontaminated state.
- Eliminates the potential for future DEP operational mistakes
- Has the best potential to restore property values
- Future redevelopment possible for something to benefit the community

Con's to Excavation

- Cost. The DEP estimated excavation would cost approximately \$38,000,000. *Note this estimate was dissected and challenged by residents and is still an unresolved item. Assumptions made by the DEP need to be further investigated.*
- Increased truck traffic. The DEP estimated it would take 3 times as many truck trips to excavate vs cap.
- Potential hazards due to the operation and disturbance of the material
- Potential complications due to unknown content that was brought in

- It may take longer if operations are limited to cooler months or complications arise.

What is the Best Solution?

The best long term solution is the one that not only remediates the site's potential to harm to the environment and public health, but is also addresses what is best for the community. The best long term solution will guarantee the safety and welfare of the residents, and virtually eliminates the potential for unhealthy gas exposure and other pollution. The best solution will involve a full environmental investigation, along with community involvement with all stakeholders, to determine the best path forward. The best solution will involve full transparency and the willingness to share information to all parties. The best solution will protect the NJ watershed, private wells, and preserve wetland areas. The best solution will follow remediation guidelines from the USEPA, N.J.A.C. 7.26E – Technical Requirements For Site Remediation, and conform to the Highlands Act Regional Master Plan.

By definition, such a solution would restore the quality of life, property values, and reputation of Roxbury, as well as eliminate the potential for future threats to the environment or public health. This IS the best solution, the solution that Roxbury deserves.

Section 20: Property Value Devaluation: Landfill Closure Contingency Fund

Documentation:

20.1 Roxbury Real Estate Health: A market analysis was performed by a NJ Licensed Appraiser using data from the NJ Association of Realtors'.

Results show that:

- Over the past 12 months, the median sales price of single family homes in Roxbury has declined 2.1%.

- Over the same time period, the median sales price of single family homes in all of Morris County has increased 4.3%.
- Over the same time period, the median sales price of single family homes in neighboring towns, Mount Olive, Mt. Arlington, Wharton, Mine Hill, Randolph, Jefferson, increased 1.9% - 10.4%

In addition, Realtor's have indicated that homes near the landfill have been extremely difficult sell. Some homes have lost contracts multiple times once buyers have further investigated the landfill problem. Residents continue to suffer from severe financial impacts due to property devaluation, with no end in sight.

The DEP has failed to inform the residents of the *Landfill Closure Contingency Fund*, a fund designed to provide compensation for damages resulting from the improper operation or closure of landfill facilities. One resident submitted an application and was told by the DEP that the fund was bankrupt for years to come.

Documentation:

- 20.2 Family's Leaving Roxbury:** An email from a resident stating how families are leaving Roxbury due to fear of health issues and DEP actions are giving them little faith the site will be ever be remediated properly.
- 20.3 Landfill Closure Contingency Fund is Bankrupt:** Email from a resident inquiring about the Landfill Closure Contingency Fund and was told it's bankrupt.

Section 21: ATSDR Petition from REACT: Public Health Threat

The Agency of Toxic Substances and Disease Registry or ATSDR is the principal federal public health agency involved with hazardous waste issues

- Advises federal and state agencies, community members, and other interested parties on the health impacts of Superfund sites and other petitioned sites.
- Determines the level of public health hazard posed by a site.

- Recommends actions that need to be taken to safeguard people's health.
- Conducts health studies in some communities that are located near Superfund sites or in locations where people have been exposed to toxic materials.
- Anyone may request or "petition" that ATSDR to do a health consultation. Most requests for health consultations come from EPA and state and local agencies.

Documentation:

- 21.1 ATSDR petition acceptance for a health consultation of Fenimore Landfill:** The DOH and DEP did not petition the ATSDR for help, despite the magnitude of toxic gas exposure and health issues present in the community. The petition was submitted by a resident on behalf of the Roxbury Environmental Action Coalition. *The ATSDR preliminary assessment declared the site a public health hazard.*
- 21.2 Letter to Joe Eldridge, NJDOH, 9/5/2013:** Since January, 2013, there have been hundreds, if not thousands of documented emails and phone calls from the residents to the NJDOH asking for help and guidance. To date, Mr. Joe Eldridge and Commissioner Mary O'Dowd have not personally returned any of the resident's phone calls or emails. These emails have been documented and can be produced upon request. Instead, the NJDOH issued a terse, one page fact sheet to the Township. REACT wrote a letter in response to the technical deficiencies of the information contained in the fact sheet and did not receive a response.
- 21.3 Letter from Rutgers Toxicology Expert to NJDOH/DEP, 10/2/2013:** This letter, a result of a site visit and review of monitor data, warns the DOH of potential health threats and also hints that excavation may be the only viable permanent solution.
- 21.4 Letter from Mt Sinai, Center for Children's Environmental Health, to Senator Bucco, 11/12/2013:** This letter summarizes health questions that residents have asked the hospital to address. It also communicates the serious impacts on community health and quality of life as a result of H₂S exposure. The letter states that excavation and transport may be necessary if H₂S levels can't immediately be reduced.
- 21.5 DEP ignored emails begging for assistance:** Seven consecutive unanswered emails were sent to the DEP by a resident asking, and then begging, for an update regarding possible relocation programs or air purifier supply to residents due to ongoing poor air quality in the community. The township also demanded the DEP respond. Hundreds of similar emails were sent to the DEP by residents and many remain unaddressed or unanswered. These can be produced upon request.

Section 22: Odor Complaints and Toxic Gas Exposure: Still Present

Despite DEP claims, hydrogen sulfide odors and exposure in the community continue through present day, even when the gas mitigation system is operating.

Documentation:

- 22.1 NJDEP Hotline Odor Complaints from 3/16/2014 to 5/16/2014:** Over 70 pages of odor complaints from Roxbury residents from the past 2 months to the NJ DEP Hotline.
- 22.2 Article from May 16, 2014 titled, "*Official warned Christie would 'take a bath' in election if Roxbury landfill operation continued.*"** Larry Ragonese says, "...we have had the odors at this site under control for many months, and have continued to monitor the site for emissions."
- 22.3 Email from sports league president on 4/24/14:** Informs coaches to cancel games and practices due to poor air quality readings
- 22.4 Honeywell alert to school parents on 4/25/14:** Informs and warns school parents of potential school closures due to elevated H₂S levels that were recently experienced.
- 22.5 Roxbury Public School H₂S protocols and action levels:** This site poses a potential health threat and ongoing nuisance and disruption to public education. These protocols will be required for years to come, as long as the potential for toxic exposure exists.
- 22.6 Ballfield Protocols and Action Levels:** kids are dependant on monitor readings to determine if it's safe to play outdoor sports. Any failure or shutdown of the gas mitigation system will result in additional impact to the community.
- 22.7 Children at local daycares and nursery schools are at risk:** These facilities were not notified by the DEP about the H₂S monitors in the township and health-based action level protocols that have been developed for children. The attachment is a Facebook post from a director at a Roxbury Daycare.