

Site remediation work shifts to the Northern Drainage Ditch area



This aerial photo shows the location of the Northern Drainage Ditch area where excavation and remediation work has begun. Below is the wooded area where engineers will construct a bypass system that diverts water from the work area so that workers can perform the excavation and recovery work in dry conditions.



through the area in order to minimize the need to dewater the area during excavation and to allow workers to more effectively remove soils in dry conditions. A new drainage ditch lined with rip rap and a settling basin, has been designed to carry clean storm water off the site. Any impacted soils in the area of this new drainage feature will be removed prior to beginning the remediation of the existing drainage ditch. Once all soils with concentrations above the MPS are removed, the area will be revegetated with new natural slopes to protect the area from erosion.

As the recapping of three landfills and remediation of the Scrap Metal Yard nears completion, site engineers at the Orrington Remediation Site shifted their focus to an area located west of the former manufacturing area known as the Northern Drainage Ditch area. Charter Environmental (profiled in the Summer 2016 newsletter) has been selected as the contractor to conduct this work under the oversight of CDM Smith and Geosyntec.

“Because of the site investigation and extensive sampling that we have done, we know where the impacted soils are located along the drainage ditch,” said Mallinckrodt’s Remediation Program Manager Kathryn Zeigler.

Ms. Zeigler explained that the remedial design objective for the Northern Drainage Ditch is to first remove soils with concentrations of mercury that are above the clean-up standards established by the Maine Department of Environmental Protection (Maine DEP) as the Media Protection Standards (MPS). The remedial design and approach to the work has been approved by the Maine DEP and as with the vast majority of materials excavated from the site, soils that exceed the MPS will be moved to a protected staging area and then loaded onto closed rail cars for shipment to approved off-site disposal facilities.

Prior to the start of excavation of the Northern Drainage Ditch, engineers constructed a bypass system to divert water that naturally flows



These photos show the excavation of soils from an area of the site known as the Scrap Metal Yard.. Site workers are seen here in July preparing the area for excavation of soils; after which heavy excavation equipment was brought in to remove the material for off-site disposal. The area was then back-filled with new soil, groomed and revegetated in October.



PRRST STD
U.S. Postage
PAID
Permit #76
Bangor, ME

On The Penobscot
P.O. Box 14
99 Industrial Way
Orrington, ME 04474

Printed on 100% recycled paper. Please recycle when done.
Published by Mallinckrodt US LLC.



On the Penobscot

Fall 2016 Vol. 12, Issue 2

Two years into final environmental recovery, Orrington project stays on schedule

As the final environmental remediation process of the Orrington Remediation Site nears its two-year mark, the complex project Site remains on schedule and has provided few surprises for engineers.

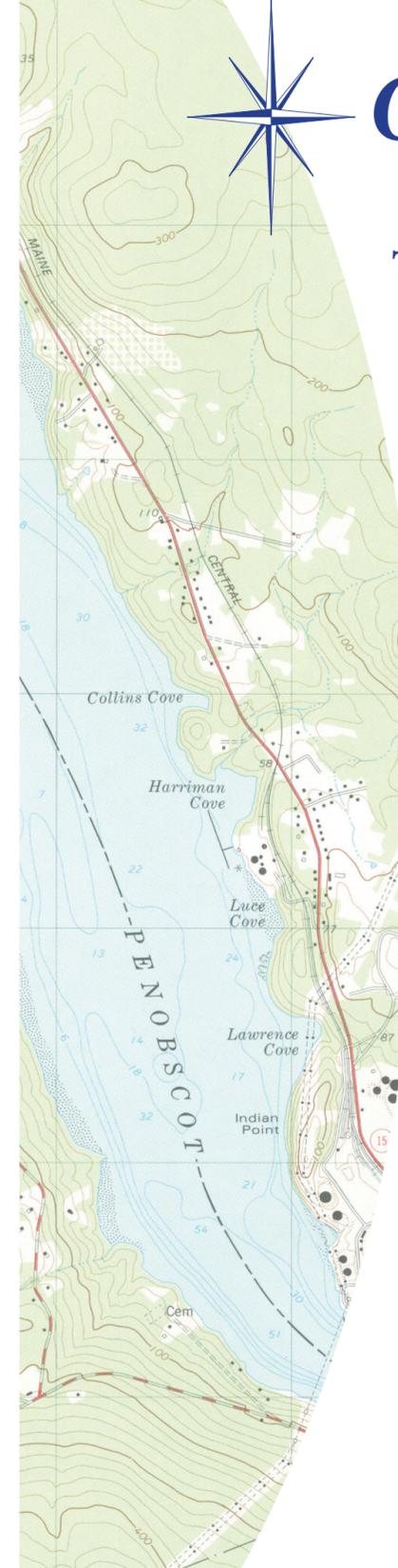
“We don’t want to get too far ahead of ourselves, but we are on schedule and have not been surprised by what we are finding as this work proceeds,” said Kathryn Zeigler, Remediation Program Manager at Mallinckrodt. “The key to this point has been all the preparation and the extensive testing that preceded the actual excavation of soils. That sampling essentially gave us a map of the soils below the ground surface and our subsequent excavation of those areas confirmed those results,” said Ms. Zeigler. “Close coordination with the Maine Department of Environmental Protection (DEP) during reviews and approvals of submittals has also been a critical aspect of keeping this process moving along on schedule.”

The remediation of the former HoltraChem plant site is focused on the 60 acres of the 235-acre site where the manufacturing operations occurred during the 33 years the plant was in operation. The plant produced chlorine and other chemicals for the pulp and paper industry in Maine until the plant was closed in 2000. Mallinckrodt US LLC as the successor to one of the former owners has sole responsibility for remediating and restoring the site.



Construction of new protective caps on landfills 3, 4 and 5 has been completed and the new vegetation has begun to grow in.

Two Years continued on next page



Report Card: Work Completed to Date

- ✓ Constructed site security
- ✓ Expanded groundwater extraction system
- ✓ Constructed a groundwater treatment plant for the contaminated groundwater
- ✓ Removal of all remaining structures except maintenance building
- ✓ Excavation of contaminated soil at nitro-methane building, restoration
- ✓ Removal of leach field and excavation of impacted soil, restored area
- ✓ Excavation of contaminated soil at Landfill Ridge, regarded slope and restored area
- ✓ Relacement of caps on Landfills 3, 4, and 5; installed new liner systems and add new topsoil & vegetation
- ✓ Excavation of contaminated soil in former Scrap Metal Yard area, regraded and restored area
- ✓ Started excavation in Northern Drainage Ditch
- ✓ Submitted final design for removal of Landfill 2

Mallinckrodt began the process of dismantling and demolishing buildings and infrastructure at the site in 2003 under the oversight of the Maine DEP. Mallinckrodt also commissioned the design and construction of a new groundwater treatment plant (GWTP) which began operation in 2012. The additional capacity designed into the new GWTP treats all ground and surface waters pumped into it from the site.

Agreement with the Maine DEP on the scope and sequencing of the remediation was finally resolved in April 2014. One of the first tasks of the site-wide remediation was rehabilitating a railroad spur that had fallen into disrepair from its days as the major source of transport of materials into and out of the site. That rail line has been at the heart of the soil excavation and removal operation with most of the materials being transported offsite by rail, keeping trucks off local roads.

Site excavation work began in earnest in 2015 with the removal of more than 55,000 tons of soil from the

Landfill Ridge Area in the northern tip of the former manufacturing area, all of which was shipped by rail to appropriate licensed landfills. That work site was then graded to reflect the natural topography plus improvements to make the entire area more stable, and then restored with new vegetation.

In 2016, site workers began work on three of the site's five landfills by installing new protective caps on Landfills 3, 4 and 5 and also began excavating soils from the Scrap Metal Yard – both projects of which were described in previous newsletters. Work on the excavation of soils from the Northern Drainage Ditch will also start this fall. [See related story on page 3].

“The transformation of this site has been remarkable to see,” said Orrington Town Manager Paul White, who has remained fully engaged in the remediation process. “With the removal of all the old structures and the excavation work that has taken place, you can now begin to imagine the future for this site.” [See related interview with Paul White on page 2].



The first major remediation effort in 2016 was the restoration of the Landfill Ridge Area which was completely excavated, backfilled with clean soils and then revegetated.

The caps on Landfills 3, 4, and 5, the Scrap Metal Yard and Northern Ditch excavation areas are expected to be substantially completed by the end of 2016 with the areas stabilized over the winter. Final seeding, planting and restoration work for these areas will then be completed next spring. 2017 promises to be another significant year of progress as the remediation of the Southern Cove and the first phase of the soils in the former manufacturing area takes place.

Interview with Paul White, Orrington Town Manager



Orrington Town Manager recently visited the work site where the final remediation process has been in full swing for the past two years.

In our Winter 2016 newsletter, we told you that future Paul White was just another Orrington resident in 2000 when the former HoltraChem plant was suddenly closed, leaving all of its employees without jobs. Mr. White was an observer as the town's largest taxpayer and employer padlocked the gate and subsequently filed for bankruptcy protection. It also left its taxes unpaid, forcing the town to assume ownership of the 235-acre site that now lay dormant.

That all changed in 2001 when Mr. White became a Selectman and was then hired as the new Town Manager in 2009. He went from an interested observer to a pivotal figure in the future of the town's only industrially-zoned parcels. Mr. White has navigated a steady course for the town to recover valuable use of the site through the environmental remediation process while working closely with the Maine Department of Environmental Protection (DEP) that is overseeing the cleanup and with Mallinckrodt US LLC, the company that has responsibility for environmental remediation of the former manufacturing site, now known as the Orrington Remediation Site. Shortly after the plant closed Mallinckrodt began dismantling and demolishing buildings, and the final remediation requirements have now been defined in an Order which defines the areas that will undergo active remediation. This process is expected to be completed by the end of 2018 and the site restoration completed by 2019.

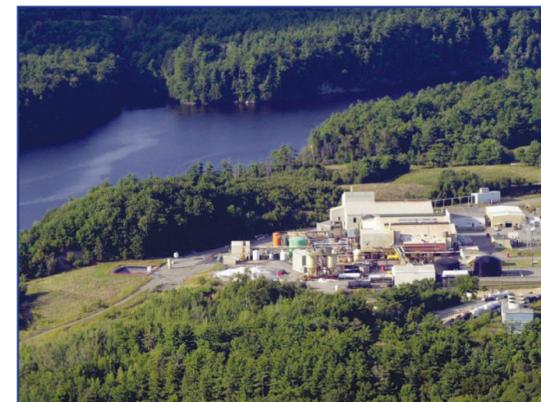
We spoke with Paul White to get his assessment of progress to date and what his and the town's hopes are for eventually reusing the site after it is remediated.

Q. The Orrington Remediation Site is a big part of your legacy as the Town Manager. What is your assessment of the progress that has been made during the past eight years?

A. Well, it took some time to get to this point, but everything seems to be headed in the right direction. Mallinckrodt has kept us informed all along and they have done everything they said they were going to do and my understanding is that they are on schedule. They have some very good engineers and contractors on the site who know what they are doing and who are focused on protecting the town and the site while this work continues.

Q. In 2010, the Board of Selectmen under your leadership intervened in the DEP review and appeal process and has remained involved to this point. What was behind that level of engagement?

A. What set this situation apart from what another town might experience is that Orrington owned the entire site in 2010 before we sold 63 acres to Mallinckrodt where the remediation work is taking place. So in addition to this site being in our community, it also largely belongs to the town and that puts us right in the middle of it. We wanted to be sure that our town's interest was protected not only through the remediation but in perpetuity after the work is completed. We have always felt that we were in a partnership and they have honored that role.



When Paul White took over as Town Manager in Orrington in 2009, the former HoltraChem site still had many large buildings and infrastructure in place. In 2016, however, the site bears no resemblance to this aerial photo showing the original plant as all but one of the old manufacturing buildings and most piping and tanks have been removed and the remediation process is well underway.

“The plan right now is for Mallinckrodt to complete this remediation by 2019 and they look to be right on schedule. The Selectmen have asked me to work directly with our Selectmen's Economic Advisory Committee (SEAC) to begin establishing a more formal process to assess what we really have with this site and start thinking in more concrete terms about what is really possible. And then we would start to really market the site to prospects who match up with that vision.” Paul White, Orrington Town Manager

Q. As part of your agreement with Mallinckrodt in 2010, you and the Board of Selectmen executed an agreement that resulted in a payment from Mallinckrodt for future economic development of the site once remediation is complete. The town also sold a portion of the site to the company so that the remediation work could be completed without the town being exposed to any liability during that work. Where does all of that stand?

A. Those funds are in an account designated as the Route 15 Industrial Site and the sole purpose of those funds is to assist us in preparing the site for future development. That could mean creating roads on the site or expanding the water system to the full site. It will enable us to eventually market this site for future reuse with all the amenities in place that future tenants will need, including power, rail and perhaps even water access.

Q. How important is this site to the town's future?

A. We think it is very important. Having a clean site where our groundwater is protected is the most important thing right now, but we are confident that that risk has already been eliminated. This is the only industrially zoned site in our town and it could be very attractive for a range of possible uses. Obviously whatever happens there in the future would be light industrial without risk to the environment, but we are getting more and more focused on how this site might attract companies so that we can expand employment in town and put this property back on our tax roll.

Q. Is there a vision that you and other town officials have for its reuse?

A. I wouldn't say we have a vision yet, but there are a lot of ideas floating around. In the coming months we would like to enlist a planner to help us sort out what is possible on that site and what the range of uses could be so that we can market it effectively. There are few sites like this in Maine – sites that have this view of the Penobscot River, easy access to major highways, rail access, power, already built water lines – not to mention a very friendly town and a great school system! It's a good start.

Q. So if that is a good start, what does the process look like in the next few years?

A. The plan right now is for Mallinckrodt to complete this remediation by 2019 and they look to be right on schedule. The Selectmen have asked me to work directly with our Selectmen's Economic Advisory Committee (SEAC) to begin establishing a more formal process to assess what we really have with this site and start thinking in more concrete terms about what is really possible. And then we would start to really market the site to prospects who match up with that vision.

Q. Are you personally committed to staying on as Town Manager through this process?

A. (Laughs). I'm not sure when I might retire, but my personal plan is to stay in this position until this site is completed and the town has full authority to market this site. I have been looking forward to that day pretty much since the day I arrived and I want to stay on the job and not retire until after that.

Thank you. Paul.

My pleasure.