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AUG 29 2014

Mr. John E. Kieling, Bureau Chief  
Hazardous Waste Bureau  
New Mexico Environment Department  
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Santa Fe, NM 87508-6303

Mr. Tom Blaine, Division Director  
Environmental Health Division  
Harold Runnels Building  
1190 Saint Francis Drive, Room 4050  
Santa Fe, NM 87502-5469

Subject: Request for Additional Extension of Storage Time at the Waste Isolation Pilot Plant Facility, Hazardous Waste Facility Permit, Number NM4890139088-TSDF

Reference: New Mexico Environment Department correspondence from Ryan Flynn to Jose Franco and Robert L. McQuinn, dated July 14, 2014, subject: Request for Additional Extension of the Waste Handling Building Storage Time at the Waste Isolation Pilot Plant EPA I.D. Number NM4890139088

Dear Mr. Kieling and Mr. Blaine:

In response to the reference letter, the Permittees are providing the attached written proposal that reevaluates the alternative storage options associated with the transuranic (TRU) mixed waste currently stored in the Waste Handling Building at the Waste Isolation Pilot Plant facility. The TRU mixed waste in storage originated from 19 shipments and from the replacement of filters in the Underground Ventilation System.

We certify under penalty of law that this document and all attachments were prepared under our direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on our inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of our knowledge and belief, true, accurate, and complete. We are aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions, please contact Mr. George T. Basabilvazo at (575) 234-7488.

Sincerely,

Original Signatures on File

Jose R. Franco, Manager  
Carlsbad Field Office

Robert L. McQuinn, Project Manager  
Nuclear Waste Partnership LLC

Enclosure

cc: w/enclosure  
T. Kliphuis, NMED \*ED  
CBFO M&RC  
\*ED denotes electronic distribution

**Response to New Mexico Environment Department  
Request for Proposal Regarding Extension of the Waste Handling  
Building Storage Time at the Waste Isolation Pilot Plant, EPA I.D.  
Number NM4890139088, Issued July 14, 2014**

**Introduction**

In accordance with the July 14, 2014, letter from the New Mexico Environment Department (NMED), the Permittees are requesting an extension of storage time for the transuranic (TRU) mixed waste currently stored in the Waste Handling Building (WHB) at the Waste Isolation Pilot Plant (WIPP). The waste in storage originated from 19 shipments of contact-handled (CH) TRU waste from generator/storage sites and from replacement of filters in the Underground Ventilation System. Some of the waste from the original 19 shipments was downloaded and disposed prior to suspension of normal waste handling operations on February 5, 2014; however, the following discussions are based on shipments as a convenient unit for discussion purposes. Since waste disposal operations will not resume by September 12, 2014, this proposal to extend the storage time for waste stored in the WHB has been prepared, pursuant to the letter from the NMED, to provide the following:

- Address potential impacts to human health and the environment.
- Provide information about alternative storage options, including a thorough analysis of the Permittees' issues with returning waste to generator sites.
- Provide a description of any options or plans for emplacement of the waste in the underground.
- Provide a description of current thermography measurements.

The Permittees are in the process of finalizing a WIPP Recovery Plan, which includes a step-wise process for returning to normal disposal operations. This plan provides the safe and environmentally sound approach for bringing the WIPP facility back to a fully safe, compliant, and operational state. The WIPP Recovery Plan projects that in early calendar year 2016, the Permittees will have progressed in the recovery process to the point that limited operations may begin to dispose of stored waste located in the WHB in the WIPP underground. Therefore, the Permittees anticipate the need to store waste until January 2016. This proposal provides the necessary justification to support an extension until January 2016.

**1.0 Potential Impacts to Human Health and the Environment Associated with Current Storage Configuration**

The Permittees have determined that continuing to store the waste in the WHB is appropriate because it minimizes risk to human health and the environment since the waste will not need to be handled, moved, or transported to another location. This determination is based on the following factors:

1. Under normal circumstances, the waste is in storage in the WHB; therefore, the condition represented by retaining the waste is not an abnormal waste management practice.

2. The WIPP facility is permitted and secure. Storage area inspections are conducted weekly as required by the Permit, and surface storage areas have not been adversely impacted by the recent fire and radiological incidents at the WIPP facility.
3. The storage limits in the Permit were negotiated at the time the Permit was originally issued and renewed. The storage limits were based on operational expectations and do not represent any physical limitations imposed by the facility.
4. The Permittees have demonstrated that they can successfully manage the waste over longer storage times with no impact to human health and the environment, as demonstrated by the current WHB configuration.
5. The emissions from the WHB are continuously filtered through high-efficiency particulate air filters, and the status of those filters is reported to the NMED on a bi-weekly basis. The WHB filtration system protects on-site workers and the public from airborne particulate releases, should there be any.
6. Leaving the waste in place minimizes the number of times it has to be handled and moved, further reducing risk from accidental spills or releases. Any waste movements within the WHB are carefully controlled through WIPP Standard Operating Procedures. There are no additional costs associated with this option.

To further clarify item three above, the Permittees see no additional risk to human health and the environment as a result of storing CH TRU waste in the WHB for long periods of time. The Part A Permit Application for the 2009 Renewal Application identifies a 25-year WIPP operational life. It was anticipated that the CH Bay would frequently be at or near its permitted capacity. Waste would be downloaded from the CH Bay while waste in the Parking Area Unit was being taken into the CH Bay for storage prior to processing for disposal. Moreover, the Permit allows for surge storage under certain conditions. Therefore, a WHB at or near capacity has always been part of the normal permitted operations.

To further clarify item six above, the waste inside of the WHB is in static storage and is in a safe configuration. There are no active waste management activities being performed, and there is no risk of drum punctures, dropping of drums, or other incidents resulting from the active management of waste containers because the waste containers are in a controlled environment. Furthermore, access to the CH Bay is restricted except for required activities, such as routine inspections and preventative maintenance activities.

The technical requirements in the Permit, Part 3, Section 3.1.1., based on 20.4.1.500 NMAC (incorporating 40 CFR §§264.170 through 264.178, *Container Management Practices*), are applied to the operation of the WHB unit in order to protect human health and the environment. The following summarizes the status of the weekly inspections and inspection requirements demonstrating that the waste stored in the WHB poses no potential impacts to human health and the environment:

- The waste containers presently stored in the WHB are in good condition. Waste containers are free from physical damage (such as severe rusting, apparent structural defects, or signs of pressurization and leakage).
- The waste containers are compatible with the waste. No evidence of incompatibility (such as bulging or corrosion) has been observed.
- The waste containers are closed and are not stored in a manner that may rupture the container or cause it to leak. No evidence of open containers or improper storage has been observed.

- The CH Bay Storage and Surge Storage Areas have a containment system that is free from cracks and gaps. Inspections confirm that the concrete floors are in good condition and meet the requirements of 20.4.1.500 NMAC (incorporating 40 CFR §264.175(b)(1)).
- Inspections confirm that waste containers are elevated 6 inches to prevent contact with potential liquids.
- Secondary containment has sufficient capacity to contain 10% of the volume of containers presently stored in the CH Bay Storage and Surge Storage Area, as described in Attachment A1, Section A1-1f (1) of the Permit.
- Run-on into the containment system is prevented as a result of the building design. There is no evidence of run-on into the CH Bay Storage and Surge Storage Area.
- There is no evidence of spilled or leaked waste or accumulated precipitation.

The WHB meets U.S. Department of Energy (DOE) design and associated quality assurance requirements for materials of construction, roof load, earthquake, tornado, flood, and protection from run-on caused by a precipitation event as follows:

- Protection from flooding or ponding caused by probable maximum precipitation events is provided by the diversion of water away from the WIPP facility by a system of peripheral interceptor berms and dikes.
- Grade elevations of roads and surface facilities are designed so that storm water will not collect within the Property Protection Area under the most severe conditions.
- The WHB heating, ventilation, and air conditioning system maintains the interior of the WHB at a pressure lower than the ambient atmosphere to ensure that air flows into the WHB, preventing the inadvertent release of mixed waste as the result of a contamination event.
- The doors at each end of the air lock are interlocked to prevent them from opening simultaneously and equalizing CH Bay pressure with outside atmospheric pressure.

Therefore, protection of human health and the environment is ensured and maintained through the WHB design criteria and through the Permittees meeting the technical requirements of 20.4.1.500 NMAC.

An evaluation was conducted on waste containers shipped from Los Alamos National Laboratory (LANL) that are currently in storage in the WHB. Of the 144 waste containers currently in storage, 11 were shipped from LANL. Some of these containers originated from debris waste stream LA-MHD01.001, which resulted from the repackaging of nitrate salts. The origin of each of the LA-MHD01.001 containers was verified and none were found to be daughter containers from the repackaging of LA-MIN02-V.001. Six containers were reassigned from the LA-CIN01.001 waste stream, which is predominantly made up of cemented nitrate salts from TA-55. These containers were reassigned to waste stream LA-MHD01.001 by LANL prior to shipment to the WIPP facility because they contained greater than 50 percent heterogeneous waste by volume (i.e., debris). However, these nitrate salts are not considered to carry the same potential hazards as the nitrate salts in the suspect LA-MIN02-V.001 waste stream due to the inorganic nature of the LA-CIN01.001 waste matrix. Radiography records were reviewed to independently verify that the inorganic matrix present in the debris waste containers was in the form consistent with the LA-CIN01.001 waste stream. In addition, thermography results (see

Section 4.0 below) do not show any issues with the waste containers in storage from LANL. None of the containers from the other waste streams being currently stored contain nitrate salts.

## **2.0 Alternative Storage Options**

### **2.1 Alternative Storage Option 1: Shipping the Waste to the Waste Control Specialists Facility in Andrews, Texas**

This option involves removing the waste from the WIPP facility and shipping it to Waste Control Specialists (WCS) for temporary storage. This option is not available at this time. Only a small quantity of the waste (approximately 4 of the 19 shipments) currently stored in the WHB at the WIPP facility may meet the WCS WAC and qualify for shipment to that facility without further treatment. These four shipments are part of the LANL 3,706 m<sup>3</sup> waste campaign. WCS has submitted an exemption request to the Texas Commission Environmental Quality (TCEQ) regarding its license that, if approved, would allow additional waste (approximately an additional 8 of the 19 shipments) to qualify for shipment. This means that at some time in the future, approximately 12 of 19 shipments currently stored at the WIPP facility could become eligible for shipment to WCS, providing the waste meets the WCS WAC. However, the remaining waste (approximately seven of 19 shipments, stored at the WIPP facility has no current or future eligibility for shipment to WCS. The TCEQ has not approved the exemption request, and it is not expected that the TCEQ will finalize a response to the exemption request prior to the September 12, 2014, deadline. There are significant costs associated with this option, including storage, handling, and transportation.

Furthermore, the current contract for the temporary storage of TRU mixed waste at WCS is only for LANL waste, thus excluding waste from the Idaho National Laboratory (INL) and SRS. A contract change would be required to allow for temporary storage of TRU mixed waste from the INL and the SRS; however the TCEQ has instructed WCS to discontinue the receipt of any TRU waste shipments, thereby precluding the WCS from receiving any additional DOE TRU waste.

Should this option become viable, the waste containers would have to be loaded into the transportation packages before being transported to WCS. On August 8, 2014, the Nuclear Regulatory Commission (NRC) was notified by the Permittees of a reportable condition pursuant to 10 CFR 71.95. This reportable condition pertained to a process change that occurred to a LANL waste stream (LA-MIN02-V.001) without prior DOE approval, resulting in a noncompliance with the NRC Certificate of Compliance No. 9218 with regard to chemical composition and compatibility requirements. As a result of this reportable condition, all shipments from LANL have been suspended until the investigations and corrective actions are complete. Shipments of waste streams other than those originating from LANL may continue upon notifying the NRC. Additionally, risks to human health and the environment associated with the handling of waste containers (e.g., container drop, lid failure, puncture) and the transporting of waste in the Type B packages (e.g., releases due to a severe transportation accident), although very low, do exist. These risks were addressed in the *Waste Isolation Pilot Plant Final Disposal Phase Supplemental Environmental Impact Statement*, Chapter 5, which addresses the environmental impacts associated with the proposed action (i.e., transportation of waste from generator/storage sites to the WIPP facility for disposal). It stands to reason that keeping the waste in a stable, secure, and permitted storage facility such as the WIPP facility poses less risk to human health and the environment than transporting the waste containers to a secondary permitted storage facility. Furthermore, moving the waste to another facility does not necessarily reduce the risk associated with storage.

## **2.2 Alternative Storage Option 2: Returning the Waste to the Generator/Storage Sites**

This option involves returning the waste to the three generator/storage sites (INL, LANL, and SRS) that originally shipped the waste to the WIPP facility. Although agreements are in place with each site to return non-compliant waste, this option would only apply to the suspect LA-MIN02-V.001 waste, of which none exists in the WHB at this time. For the waste currently stored in the WHB, negotiations will be required with the individual state regulatory agencies and state governments prior to returning waste to each generator/storage site or shipping the waste to a single DOE generator/storage site. Shipping any waste back to LANL is not being considered due to Permit and regulatory agreements. The complexities of state-specific negotiations render it unlikely that arrangements can be made to ship the waste back to the generator/storage sites prior to the September 12, 2014, deadline. There are significant costs associated with this option, including administrative, handling, and transportation costs. Therefore, the Permittees have concluded that storing the waste at the WIPP facility until the underground is available for the resumption of disposal activities is the favored option, and it provides the least risk to human health and the environment with minimal additional cost. Alternative Storage Option 1 (above) provides a description of the risks and complexities associated with the transportation of the waste containers currently in storage at the WIPP facility.

### **2.2.1 Returning Waste to Idaho National Laboratory**

Several consent orders in place at INL make return shipments to INL very difficult. Specifically, these orders limit storage of off-site waste at the INL to 6 months. Furthermore, although shipments of waste to the WIPP facility have been curtailed, INL has continued to certify and stage waste pending shipment. Storage space for off-site waste at INL is also extremely limited.

#### **2.2.1.1 Memorandum between the Western Governors and the U.S. Department of Energy**

The Western Governors' Association implements provisions of the WIPP Land Withdrawal Act (Public Law 102-579, as amended):

*The undersigned agree to work cooperatively, through the regional planning process, to develop the planning and operating procedures for TRU waste shipments originating in or destined for the Western United States. Finally, the undersigned support the principle that the transportation of all DOE-Environmental Management shipments of radioactive materials should be safe and uneventful.*

An agreement between the Western Governors' Association and the DOE has been incorporated into the WIPP Transportation Plan:

*Parties agree to conduct TRU waste shipments through the Western States in accordance with the protocols contained in the WIPP Transportation Program Implementation Guide and TRU Waste Transportation Plan, not including shipments within the same DOE site or other TRU waste shipments as agreed to between DOE and the states.*

### **2.2.1.2 1995 Settlement Agreement**

The 1995 settlement agreement sets forth spent fuel storage and disposal requirements for the INL, and fines and penalties if not met. The agreement requires DOE to treat all high-level waste in preparation for final disposal elsewhere by 2035. This agreement also contains provisions related to transuranic waste and alpha-contaminated mixed waste:

*DOE will treat transuranic and alpha-contaminated mixed waste now stored at the INL. Transuranic waste will be removed from the state by a target date of Dec. 31, 2015, and no later than Dec. 31, 2018. An agreement (Agreement to Implement U.S. District Court Order dated May 25, 2006) between the state of Idaho and DOE was finalized in 2008 setting forth the compliance requirements for this section of the Settlement Agreement. Any Transuranic Waste retrieved from the SDA after December 31, 2017 shall be shipped from the State of Idaho to an appropriate disposal facility within 365 days of the date from which it was retrieved from the SDA and placed in a container.*

The INL application of this requirement involves 6 months of storage and 6 months to ship waste from the Subsurface Disposal Area (SDA). Key requirements applicable to TRU waste are as follows:

- DOE must remove a specified amount of the TRU waste buried in the SDA (about 15 acres of pits and trenches of the 97-acre SDA landfill) at the INL and ship it to a secure facility out of Idaho. The settlement agreement requires retrieval of five targeted waste types most likely to contain TRU waste and uranium.
- Excavation and retrieval from at least 5.7 acres and up to 7.4 acres of the SDA are likely to contain most of the TRU waste, hazardous solvents, and uranium.
- All retrieved TRU waste and at least 7,485 cubic meters of targeted waste must be shipped out of Idaho.
- 741 sludge, 742 sludge, 743 sludge, graphite waste and filters/pre-filters, uranium oxide co-located with targeted waste, and other waste streams mutually agreed by the Parties, as the result of operational experience or process knowledge, must be addressed to routinely be recognizable as TRU waste.
- The SDA contains 6,238 m<sup>3</sup> of targeted waste (7,485 m<sup>3</sup> packaged for shipment).

### **2.2.1.3 The Supplemental Agreement to the Agreement Requirement**

DOE shall ship all TRU waste not located at INL, currently estimated at 65,000 m<sup>3</sup> in volume, to the WIPP (or other such facilities designated by the DOE) by a targeted date of December 31, 2015, and in no event later than December 31, 2018.

### **2.2.2 Returning Waste to Los Alamos National Laboratory**

The shipment of waste in the WHB to LANL is extremely complex as a consequence of the existing consent orders and Permit requirements. The LANL Permit, Section 2.2.1, has specific requirements for acceptance and storage of hazardous waste from off site (such as derived waste or residues generated at LANL that are sent off-site for treatment, waste generated at TA-57, hazardous waste generated from a solid waste management unit listed in the Permit, and mixed waste sealed sources). Returning waste currently in storage in the WHB to LANL does

not meet those provisions and may require a Permit modification. The waste would be more secure at the WIPP facility than at LANL.

Following is an analysis of LANL Consent Orders that impact returning shipments:

- The Federal Facility Compliance Order (1995) commits LANL to the development of a Site Treatment Plan to achieve compliance with Land Disposal Restrictions (LDR) storage and treatment of mixed waste. Annual updates were required beginning March 31, 1996, and annually thereafter. Once approved, the annual update is incorporated into this Order.
- Waste is deleted from this Order when documentation is provided to NMED that the waste has been received at an off-site Treatment, Storage, and Disposal Facility, it has been determined by NMED that the waste is no longer subject to LDR, or as a consequence of applicable statute or state regulation, the mixed waste or waste category is no longer subject to LDR requirements under the Hazardous Waste Act.
- A 1997 amendment defined the framework for how waste may be deleted from the Order (i.e., radioactive waste with no hazardous component).

#### **2.2.2.1 Los Alamos National Laboratory Framework Agreement: Realignment of Environmental Priorities (January 2012)**

- The DOE / National Nuclear Security Administration committed to the removal of all non-cemented above-ground Environmental Management Legacy TRU and newly generated TRU waste currently stored at Area G as of October 1, 2011, but no later than June 30, 2014. This inventory of above-ground TRU is defined as 3,706 m<sup>3</sup> of material.
- The DOE / National Nuclear Security Administration committed to complete removal of all newly generated TRU waste received in Area G during Fiscal Year 2012 and 2013 by no later than December 31, 2014.
- Governor Martinez requested that the DOE / National Nuclear Security Administration and NMED allocate sufficient funding to accelerate the removal of above-ground TRU waste inventory and continue DOE's stewardship of water resources at LANL.

#### **2.2.3 Returning Waste to Savannah River Site**

There are no consent or administrative orders against SRS that preclude shipment of TRU waste from the WIPP facility, but shipping waste from New Mexico to South Carolina would be less protective of human health and the environment for the reasons stated previously in this proposal. Any shipment of waste back to SRS would require the approval of the South Carolina Department of Health and Environmental Control. The security profile of the SRS waste stream has changed since the waste was shipped. An examination of the ring bolt to the drum lids is required to determine if the tamper-indicating devices (TIDs) are still intact. This will require breaking down existing payloads, performing verification, then rebuilding prior to shipment.

#### **2.3 Alternative Storage Option 3: Shipping the Waste to a Secondary Generator/Storage Site**

In conclusion, the most environmentally protective option for storage of waste pending the recovery of the WIPP facility to normal operations is retention in the WHB. Site-specific Resource Conservation and Recovery Act (RCRA) Permits (and associated WAC) may

preclude returning waste to generator/storage sites and/or shipping waste to a secondary permitted storage facility or require dialog with and notifications to state regulators, permit modifications, issuance of a regulatory order, or potentially sampling and analysis, as follows:

- INL – The INL WAC requires that organic and inorganic constituents and metals must be identified and quantified. Once negotiated with the Idaho regulators, the Advance Mixed Waste Treatment Program could accept and store waste for 6 months, the facility then has 6 months to dispose. Limited storage capacity may be an issue. Long-term storage (i.e., greater than 6 months) is not a probable option.
- LANL – The LANL Permit, Section 2.2.1, has specific requirements for acceptance and storage of hazardous waste from off-site that do not include the waste streams in the WHB. Returning LANL waste in the WHB does not meet those provisions and may require a Permit modification.
- SRS – The SRS Hazardous and Mixed Waste Permit, Section II.H.2, requires an order issued by the South Carolina Department of Health and Environmental Control pursuant to the Federal Facility Compliance Agreement in order to receive hazardous or mixed waste.
- Hanford Site – Waste must meet WAC and sampling and analysis plan criteria. Discussion with the waste generator is warranted to determine if any characterization beyond the existing acceptable knowledge is needed.
- Oak Ridge National Laboratory – The Oak Ridge National Laboratory has some capacity for storage of off-site waste. Approval from the Tennessee Department of Environment and Conservation is required.

### **3.0 Option for Emplacement of Waste in the WIPP Underground**

Upon closure of Panel 7, Room 7, as required by the NMED, the stored waste would be transported underground and emplaced in an open designated room.

Based on the characterization of the contaminated areas in the underground, a transition zone will be established at the edge of the contamination areas in the mine in order to transfer the waste from clean equipment to contaminated equipment that will be operated for emplacement. Currently 6-ton forklifts and CH Waste Transporters located in Panel 7 that are contaminated. Waste Operations has one CH Transporter and forklift with the appropriate handling attachment that can be used to transport waste from the Waste Shaft Station to the transition zone. Once the waste is transferred in the transition zone, a contaminated CH Transporter and forklift will be used to move waste to the disposal room and complete emplacement.

Protective equipment will be required for all personnel emplacing waste in accordance with a Radiological Work Permit based on radiological survey results after the decontamination activities are completed.

Prior to starting any waste emplacement or decontamination activities in Panel 7, it will be necessary to complete the following:

- Complete the Accident Investigation Board investigation and release Panel 7.
- Restore operation of the Waste Hoist.

- Roll back certain radiological areas currently established in the underground based on survey results.
- Complete required maintenance on necessary equipment in the underground. This includes waste handling and mining equipment.
- Perform required ground control in accessible areas of the underground to support a safe travel path to the disposal area.
- Install initial closures in Panel 6 and closure in Panel 7, Room 7 pursuant to the Nitrate Salt Bearing Waste Container Isolation Plan.

Progress in these areas is reported to the NMED regularly as required by NMED Administrative Orders. In addition to the waste stored on surface, this option could be used for disposal of site derived waste that is accumulated from recovery activities.

#### **4.0 Current Thermography Measurements**

Recent thermography measurements of LANL waste currently in storage in the WHB are shown in Attachment 1. These measurements were made using a Fluke 62 Max IR, which is calibrated annually per the WIPP Instrumentation and Calibration Program. Ambient temperature readings are taken prior to obtaining readings on the containers.

**Attachment 1: Thermography Measurements (F°) for Waste in Storage in Waste Handling Building by Payload Number**

<b>Date</b>	<b>Ambient Temp.</b>	<b>LA140018 172</b>	<b>LA140021 137</b>	<b>LA140020 190</b>	<b>LA140021 147</b>	<b>LA140020 126</b>	<b>LA140021 133</b>	<b>LA140019 127</b>	<b>LA140020 156</b>
8/13/2014	81.6	80.0	79.0	79.0	79.0	79.0	79.0	79.0	81.0
8/14/2014	81.6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.6
8/15/2014	80.6	80.8	80.0	79.8	80.0	81.0	80.6	80.4	81.2
8/16/2014	79.0	79.2	79.2	79.0	79.0	79.8	80.4	79.6	80.8
8/17/2014	80.0	79.8	79.4	79.2	79.2	79.8	79.6	79.6	81.0
8/18/2014	80.2	80.0	79.4	79.2	79.2	79.8	79.8	79.6	80.6
8/19/2014	80.4	78.8	78.4	78.6	78.8	79.4	79.4	79.6	80.4
8/20/2014	81.6	80.8	80.6	80.4	80.8	80.2	80.8	80.8	80.4
8/21/2014	80.4	80.6	80.8	80.4	80.6	81.0	80.6	81.0	81.6
8/22/2014	80.8	80.6	80.6	80.2	80.4	80.8	80.4	81.0	81.4
8/23/2014	80.8	80.4	80.2	79.8	80.2	80.8	80.8	80.6	81.6
8/24/2014	80.8	80.2	80.2	79.6	80.2	80.8	80.6	80.4	81.4
8/25/2014	82.9	79.4	79.4	78.4	79.2	79.8	79.6	79.6	81.4
8/26/2014	80.0	79.6	79.4	79.0	79.4	80.4	80.8	80.0	80.8