



April 29, 2011

Mr. Mike Boudloche
Chapter 7 Bankruptcy Court Trustee
555 North Carancahua, Ste. 600
Corpus Christi TX 78478

Re: **Revised Addendum 1** to the Demolition Work Plan
Former ASARCO-Encycle Demolition Project

Mr. Boudloche,

Per your e-mail correspondence received on March 25, 2011 as well as follow up correspondence received on April 21, 2011 from the Texas Commission on Environmental Quality (TCEQ), Specialized Industrial Services (SIS) is submitting this **Revision to** Addendum 1 to provide supplemental information to the existing Demolition Work Plan developed for the former ASARCO-Encycle facility. Supplemental information addressed herein includes the following:

- A Texas PE-certified design of the opening to be utilized in the base of the smokestack to allow equipment access for debris removal;
- A **more comprehensive and** detailed demolition schedule, including a sequencing of events for each major building to be demolished, sequencing of friable asbestos removal, hazardous debris removal, and demolition of buildings with structural issues;
- Additional written detail regarding the amount of engineering design and engineering support during demolition, and;
- **Response to the TCEQ April 21, 2011 letter regarding debris removal from the smoke stack.**

Visual observation and structural integrity assessment of the smoke stack was conducted on April 1, 2011, by Gary Jaster, P.E. of Jaster-Quintanilla and Associates, Inc. to determine if there are areas of structural concern that could affect planned asbestos abatement and demolition of the stack. No structural issues associated with the stack were noted in the report which is presented in Attachment 1.

A detailed demolition schedule with the estimated sequence of events and phasing of project activities is included in Attachment 2. It is important to note that while the phasing of waste removal and demolition should remain consistent with this document, the sequencing of work activities is subject to



change based on field observations, weather, and other unknown issues that may arise that are not within the direct control of the project team. Updates to the schedule may be provided as the project progresses based on modifications to execution strategy and resultant change in demolition sequence.

With regard to engineering design and engineering support during demolition activities, the project team has several senior demolition managers with 25 years or more of experience and as such are competent individuals at conducting demolition surveys and structure assessment. However, should conditions warrant, the project team has retained the services of a structural engineering firm which can provide advanced engineering assessment as needed.

In response to the TCEQ comment in the April 21, 2011 letter (Comments to Addendum 1 of the Demolition Work Plan) regarding removal of saw cut stack debris from within the smoke stack, SIS will be enlarging the smaller 55-inch opening by removing non-load bearing brick from the opening. This will increase the opening size to accommodate debris removal from within the stack. Removal of the brick will not disturb the concrete structure that supports the stack. During demolition of the smoke stack, SIS will incorporate the structural engineering recommendations provided in Attachment 1, including placement of wood decking or sand at the base of the smoke stack interior to dissipate energy from the falling broken pieces.

The information provided above is believed to be sufficient to address the areas of the Demolition Work Plan which were requested to be supplemented. Should additional questions arise please contact SIS directly.

Sincerely,

Ed Ramirez

Enclosures: As Noted

Attachment 1



JASTER-QUINTANILLA & ASSOCIATES, INC.

CONSULTING ENGINEERS
1608 WEST SIXTH STREET SUITE 100 AUSTIN, TX 78703
512.473.9094 www.jqeng.com 512.473.9179

April 7, 2011

Mr. Brent Fleming
Specialized Industrial Services
C/O mlindstrom@energyrenewalpartners.com

**Re: Structural Integrity Assessment of Smoke Stack
Former Encycle/Texas, Inc. /ASARCO Facility (Encycle)
5500 Up River Road
Corpus Christi, Nueces County, Texas**

Dear Mr. Fleming:

As requested by Mike Lindstrom, I performed a visual observation and structural integrity assessment of the smoke stack at the former Encycle/ASARCO site on Friday, April 1, 2011.

The purpose of my observation and assessment was to determine whether there are areas of structural concern that would affect planned asbestos abatement and demolition of the stack. Mr. Julian Camacho provided access to the site and accompanied me during my visit. My observations and opinions of the structural integrity of the smoke stack are based on visual assessment only. No drawings or design calculations of any of the structural elements of any part of the above ground structure or foundation were provided. No material testing of structural components was performed and no structural element was removed, uncovered or taken apart. My assessment was made while standing on the ground surface, and without benefit of any mechanical lifts or hoists. The assessment that follows is based on reasonable and prudent observations made during my visit to the site.

The smoke stack is reportedly 315 feet tall and is located near the western most part of the referenced site. It varies in diameter from approximately 21'-4" to reportedly 8 to 10 feet at the tip (Photo 1). The exterior face of the stack is exposed concrete with alternating layers of paint coating which is in various stages of peeling. The interior face of the stack is lined with masonry with no visible concrete. There is a steel framed access hatch at the north elevation which is approximately 24" wide and 36" tall (Photo 2). The thickness of the wall of the smoke stack is approximately 32" at the access hatch (Photo 3). The steel framed access hatch is framed within a masonry opening that is approximately 55" wide and 96" tall (Photo 4). While at the site we attempted to determine the thickness of the concrete portion of the wall by removing a small portion of the brick masonry at the interior face of the smoke stack (Photo 5). We chipped approximately 4-6" but were unable to locate the concrete. Looking vertically while standing within the stack, there appears to be 7 or 8 "rings" that protrude slightly toward the inside of the stack as one looks toward the tip. There was insufficient light to determine if these rings were concrete or masonry.

At the base of the smoke stack at the south elevation is a small exterior brick masonry enclosure with a small opening through the wall of the stack (Photo 6). Slightly above the base of the stack at the east elevation is an elevated structure which penetrates through the wall of the stack (Photo 7). The opening through the stack wall is approximately 9' wide and 11' tall, and is located approximately 9' above ground elevation.

At the west elevation of the smoke stack there is evidence that a concrete core of a portion of the stack wall was taken (Photo 8). The core measures about 11½" deep. I understand the purpose of the core was for

environmental testing purposes. Visual appearance of the matrix of the concrete suggest concrete of good quality and strength. The core was taken through reinforcing which indicated 1" vertical reinforcing and 3/8" horizontal ties.

Near the southwest elevation of the smoke stack there is evidence of some thermal or temperature cracking near the base of the concrete wall (Photo 9). I do not believe this is a structural concern as it is likely related to normal shrinkage of concrete during the curing process.

At the south elevation, there is a vertical ladder consisting of bent reinforcing extending outward from the stack wall (Photo 10). Because of the highly corrosive salt air environment, I recommend that the ladder not be used during the course of the work as corrosion or weakening of the reinforcing is highly likely.

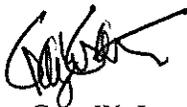
In general, I did not observe visual structural concerns with the existing smoke stack. I understand that after abatement of the exterior paint coating, the plan is to dismantle the smoke stack by from the top down removing 4 to 5 foot portions and drop them through the core within the stack. The pieces would then be removed through the opening at the north elevation at the base of the stack (Photo 2). This opening may be enlarged by removing the existing masonry filled opening that is approximately 55" wide and 96" tall. In addition, the elevated structure penetration at the east elevation (Photo 7) may be utilized to remove debris. I do not recommend removing the portion of smoke stack wall beneath that elevated penetration as that appears to consist of original concrete structure and offers a sufficient amount of structural support.

I do recommend that extreme care be taken when dropping portions of removed smoke stack to assure that debris is allowed to "free fall" without hitting the sides of the smoke stack. Placement of plywood decking or sand at the base of the core will help to dissipate the energy from the falling broken pieces. In addition, extending plywood around the core interior approximately 8 to 10 feet tall above the base will help to minimize damage to the lower portion of the stack. I also suggest that the initial removal occur on the northwest section of the stack and proceed in both directions toward the southeast or prevailing wind side. This will allow for each 4 to 5 foot layer to be removed while maintaining the strongest section of stack wall to remain in place to resist the likely direction of lateral force.

It is also important to note that this is a coastal site with exposure to high and sudden wind activity. No personnel shall work on the smoke stack when sustained wind speeds exceed tropical storm force (≥ 39 mph) and the smoke stack should be structurally reassessed if subjected to hurricane force winds (≥ 74 mph).

I hope my assessment of the structural integrity of the smoke stack is beneficial. Please call if you wish to discuss or have any questions.

Sincerely,



Gary W. Jaster, P.E.
Principal
Jaster-Quintanilla & Associates, Inc.
TBPE Firm # F323



W/Attachments



Photo 1 – View of Smoke Stack Looking North



Photo 2 – View of Access Hatch at North Elevation of Smoke Stack



Photo 3 – View of Overall Wall Thickness of Smoke Stack Taken at Access Hatch at North Elevation

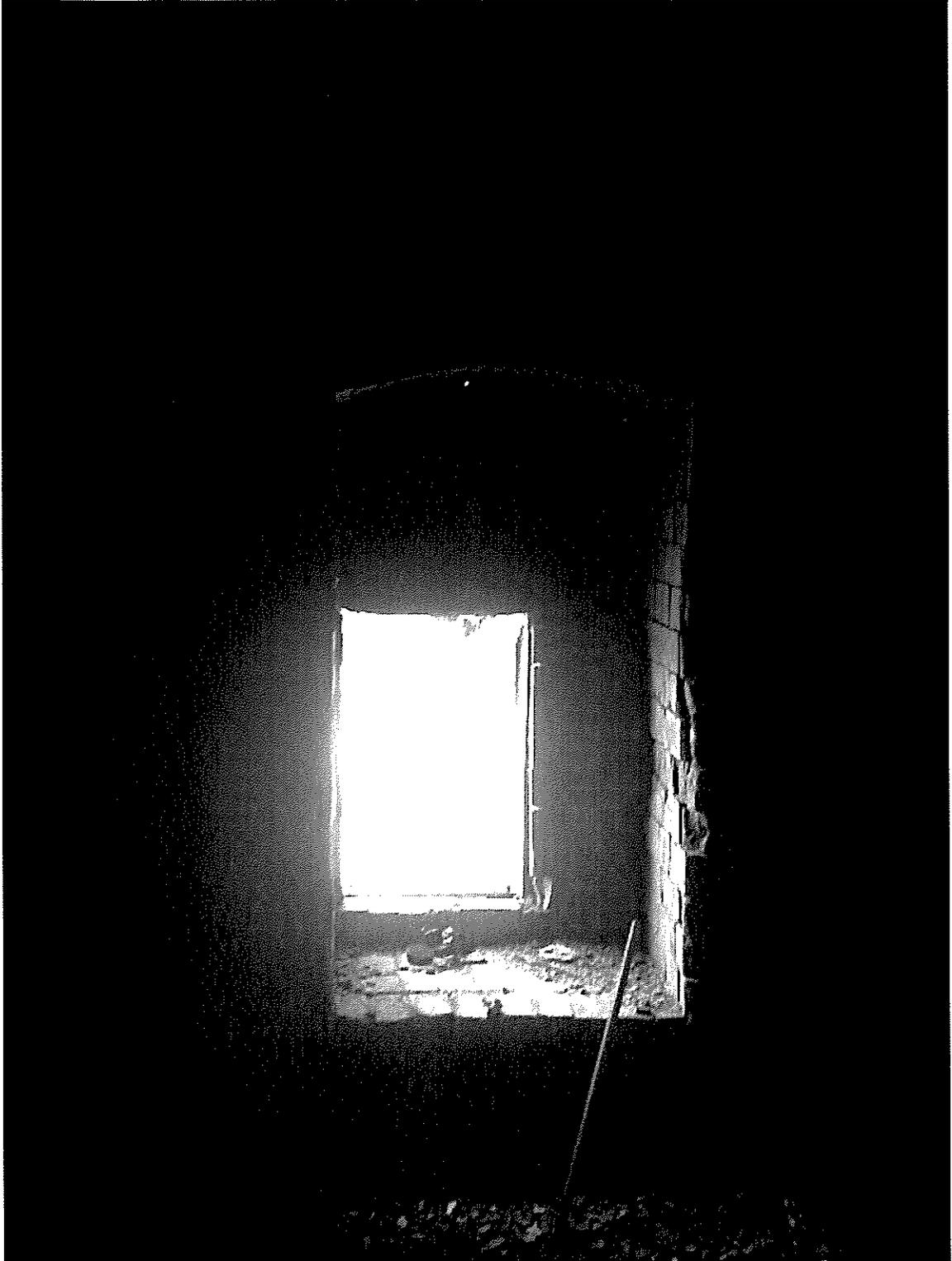


Photo 4 – View of Access Hatch at North Elevation Taken From Interior



Photo 5 – View of Northwest Corner of Access Hatch Taken From Interior



Photo 6 – View of Base of Smoke Stack Taken at South Elevation Looking North



Photo 7 – View of Elevated Structured Opening at East Wall of Smoke Stack



Photo 8 – View of Previously Taken Core of Wall at West Elevation of Smoke Stack



Photo 9 – View of Hairline Cracking Near Base of Smoke Stack at Southwest Elevation

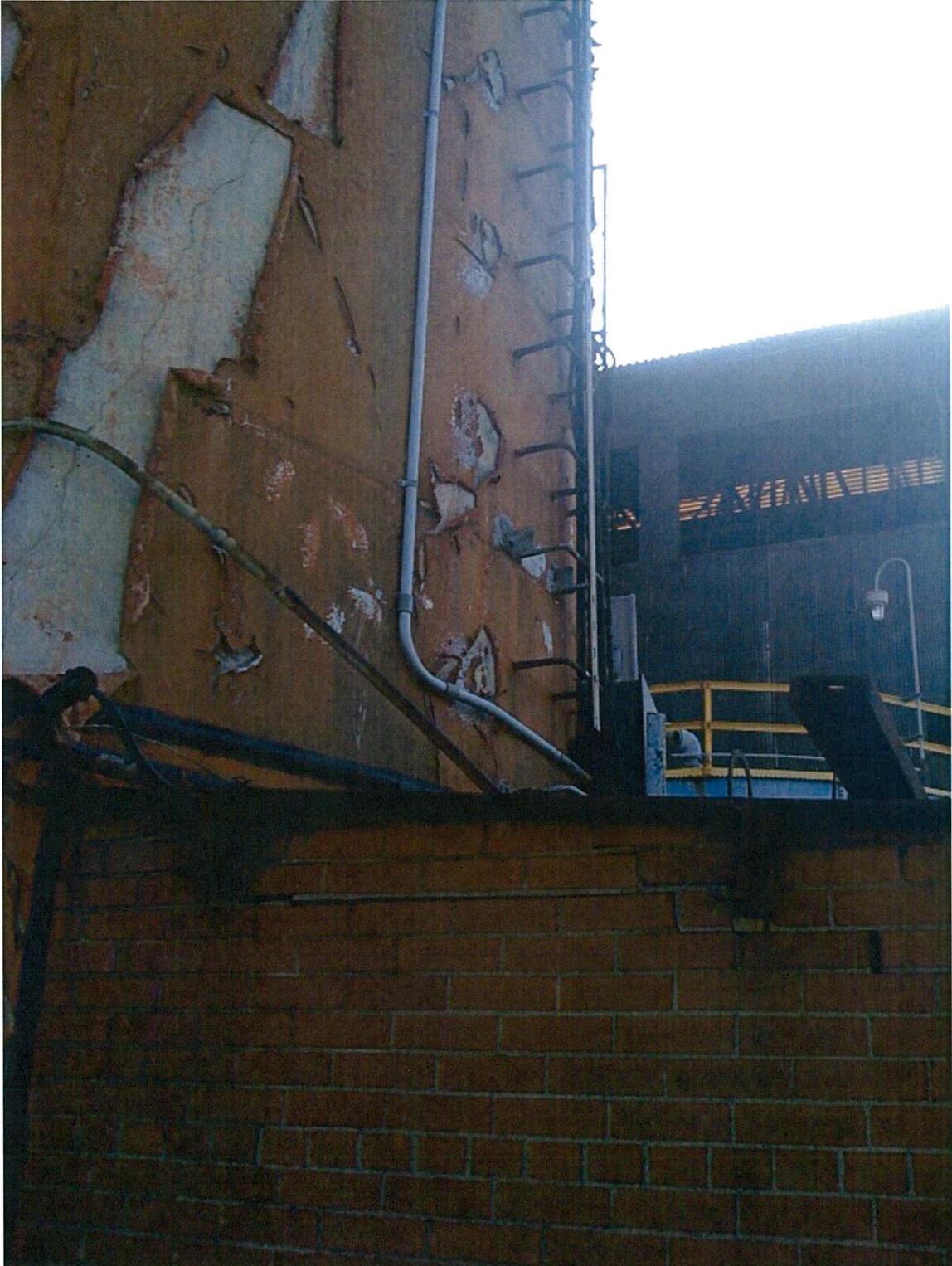


Photo 10 – View of Vertical Ladder at South Elevation of Smoke Stack

Attachment 2

Attachment 2
Former ASARCO-Encycle Facility Demolition
Schedule of Demolition Activities

Structure	Sequence of Tasks	Planned Schedule 2011	
		Start Date	Completion Date
Building 1 - Facility 1	Install temporary plywood decking on second floor, excluding the northern second level catwalk which is structurally unsound (Jaster-Quintanilla, 2011)	April	April
	Remove hazardous waste liquids from tanks listed on NOR that have not been closed, per the approved closure plan (ARCADIS, 1999).	May	June
	Provide access to tanks as needed to remove sludges and solids, and decontaminate tanks per the approved closure plan (ARCADIS, 1999).	May	May
	Clean Silos A, B, and C	May	June
	Conduct ACM abatement of regulated and non-friable material, excluding the northern second level catwalk which is structurally unsound (Jaster-Quintanilla, 2011)	May	June
	Remove friable ACM from structurally unsound areas above northern second level catwalk during demolition. Move friable ACM to a structurally sound (safe) area for abatement.	June	July
	Demolish Facility 1.	July	July
Building 2 - Facility 2	Remove hazardous waste liquids from tanks listed on NOR that are outside the building footprint and have not been closed, per the approved closure plan (ARCADIS, 1999).	June	June
	Provide access to tanks outside the building as needed to remove sludges and solids, and decontaminate tanks, per the approved closure plan (ARCADIS, 1999).	June	June
	Clean Silos D, E, F, and G	June	June
	This entire building is structurally unsound (Jaster-Quintanilla, 2011). Remove friable ACM from the building during demolition. Move friable ACM to a structurally sound (safe) area for abatement.	July	July
	Entire building is structurally unsound (Jaster-Quintanilla, 2011). Remove the four old ASARCO tanks on the second floor during demolition. Place in lined roll-off box or similar lined containment. Transport entire tanks and contents to licensed hazardous waste landfill.	July	July
	Entire building is structurally unsound (Jaster-Quintanilla, 2011). Remove wood from the closed old ASARCO tanks in the eastern half of the building during demolition. Transport wooden tank material to licensed hazardous waste landfill.	August	August
	Demolish Facility 2.	September	September
Building 3 - Facility 3	Remove residual hazardous waste from ground level floor from eastern half of building. The floor in the western half of the building has already been decontaminated during final facility closure activities (ARCADIS, 2004).	September	September
	Remove friable ACM from building.	September	October
	Clean Silos H and I	October	October
Building 4 - Facility 4	Demolish Facility 3.	November	November
	Remove friable ACM from building.	October	October
	Clean Silos J and K	October	October
Building 5 - East Product Storage	Demolish Facility 4.	November	November
	Demolish Building	April	April
	Demolish Building	April	April
Building 6 - Product Storage	Demolish Building	April	April
	Remove friable ACM from building.	April	April
	Remove hazardous waste that may be present in process equipment and vessels	April	April
Building 7 - Old Casting Building	Demolish Building	April	April
	Demolish Building	April	April
Building 8 - Former Hazardous Waste Storage Building	Remove hazardous waste that may be present.	April	April
	Demolish Building	April	April

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Former ASARCO-Encycle Facility Demolition
Schedule of Demolition Activities

Structure	Sequence of Tasks	Planned Schedule 2011	
		Start Date	Completion Date
Building 9 - Sanitary Wastewater Bldg	Install temporary wood decking second floor and commence friable ACM Abatement.	April	April
	Demolish structure after completing friable asbestos abatement	April	April
Building 10 - Numbered Bins Building	Remove hazardous waste that may be present.	April	April
	Demolish Building	April	April
Building 11 - Wastewater Treatment Building	Decontaminate drum filter 80591 in accordance with approved closure plan (ARCADIS, 1999).	May	May
	Remove hazardous waste that may be present.	May	May
	Demolish Building	May	May
Building 12 - Brick Building	Demolish Building	May	May
Building 13 - Yard Offices	Remove friable ACM from building.	June	June
	Demolish Building	June	June
Building 15 - Plant Engineering	Demolish Building	April	April
Building 16 - East Cell House	Remove hazardous waste residue/debris on floor on east side of building which is structurally sound (Jaster-Quintanilla, 2011).	April	April
	Remove friable ACM east side of building which is structurally sound (Jaster-Quintanilla, 2011)	April	April
	Remove friable ACM from structurally unsound areas in west side of building during demolition. Move friable ACM to a structurally sound (safe) area for abatement.	May	May
	Demolish East Cell House.	June	July
	During demolition, remove hazardous waste residue/debris on floor on west side of building which is structurally unsound (Jaster-Quintanilla, 2011).	July	July
Building 18 - Brick Building	Demolish Building	May	May
Building 19 - Brick Building	Demolish Building	April	April
Building 20 - Brick Building	Demolish Building	May	May
Building 21 - Oil House	Remove waste oil containers from building	May	May
	Demolish Building	May	May
Building 22 - Metal Building	Demolish Building	April	April
Building 23 - Metal Building	Demolish Building	April	April
Building 24- West Baghouse	Remove friable ACM.	May	May
	Remove residual hazardous waste from ground level floor.	May	May
	Demolish Building	May	May
Building 25 - Powerhouse	Remove friable ACM from building.	June	June
	Remove hazardous waste that may be present in process equipment and vessels, including lab chemicals if present.	July	July
	Demolish Building	August	September
Building 26 - West Cell House	Remove hazardous waste from east side of building which is structurally sound (Jaster-Quintanilla, 2011)	July	August
	Remove friable ACM east side of building which is structurally sound (Jaster-Quintanilla, 2011)	July	August
	Remove friable ACM from structurally unsound areas in west side of building during demolition. Move friable ACM to a structurally sound (safe) area for abatement.	August	September
	Demolish West Cell House.	August	September
	During demolition, remove hazardous waste residue/debris on floor on west side of building which is structurally unsound (Jaster-Quintanilla, 2011).	September	September

Attachment 2
Former ASARCO-Encycle Facility Demolition
Schedule of Demolition Activities

Structure	Sequence of Tasks	Planned Schedule 2011	
		Start Date	Completion Date
Building 27 - South Reagent Storage Building	Remove friable ACM from building.	May	May
	Remove residual hazardous waste if present.	May	May
	Demolish Building.	May	May
Building 28 - Reagent Storage Building	Remove friable ACM from building.	May	May
	Remove hazardous waste that may be present in process equipment and vessels	May	May
	Demolish Building	May	May
Building 29 - Brick Building	Demolish Building	June	June
Building 30 - Brick Building	Demolish Building	June	June
Building 31 - Spill Sorbent Storage Building	Remove hazardous waste that may be present.	April	April
	Demolish Building	April	April
Building 32 - Zinc Building	Install temporary wood decking second floor and commence friable ACM Abatement.	June	June
	Demolish structure after completing friable asbestos abatement	June	June
Building 33 - Lunch Room	Demolish Building	April	April
Building 34 - MCC L&M	Demolish Building	April	April
Building 35 - Scale House	Demolish Building	April	April
Building 36 - Reagent Storage	Remove hazardous waste that may be present.	June	June
	Demolish Building	June	June
Building 37 - MCC 29D	Demolish Building	April	April
Building 38 - Brick Building	Demolish Building	April	April
Building 39 - Sub-Station	Demolish Building	May	May
Building 40 - Sub-Station	Demolish Building	May	May
Building 41 - Lab	Remove lab chemicals if present.	May	May
	Demolish Building	May	May
Building 42 - Metal Building	Not to be demolished	May	May
Building 43 - Brick Building	Demolish Building	May	May
Building 44 - Brick Building	Demolish Building	May	May
Building 45 - Brick Building	Demolish Building	May	May
Smokestack	Disconnect Aviation Lights	April	April
	Remove hazardous waste from smoke stack ground level.	May	May
	Remove hazardous waste from brick building adjacent to smoke stack.	May	May
	Remove asbestos from smokestack exterior.	May	June
	Prepare stack for demolition in accordance with structural assessment report (Jaster-Quintanilla, 2011).	June	June
	Demolish smoke stack in accordance with demolition plan.	June	August

Notes:

- (1) Non-friable ACM may be removed during demolition in accordance with the procedures specified in the approved Asbestos Abatement Plan.
- (2) Exact start and completion dates are contingent upon weather, equipment availability, and personnel schedules.

References:

Jaster-Quintanilla & Associates, "Structural Integrity Assessment, Former Encycle/Texas Inc./ASARCO Facility (Encycle), 5500 Up River Road, Corpus Christi, Nueces County, Texas ", March 15, 2011.

ARCADIS, "Final Facility Closure and Post-Closure Plan for Non-Permitted Units, Encycle/Texas, Inc., Corpus Christi, Texas ", November 1999.

ARCADIS, "Final Closure Certification Report - Facility No. 2 Non-Permitted Units, Encycle/Texas, Inc., Corpus Christi, Texas ", November 9, 2004.