PROPOSED FACILITY VIEWS

The first two photos below are an artist’s rendering representing what you would see from the Midland Beaver Road car park directly across the river from the facility, a location that gives you a complete view. Note that while the perspective, heights and lighting are accurate based on current design, the equipment is for placement only.

Once in operation, the facility would be lit at night as required for safety and security, using glare-reduction lights that are directed downwards. The facility would have 10 tall structures, ranging approximately 200- to 300-feet high, including the emergency flare, furnaces and cogeneration plant equipment. (For comparison, the Horsehead zinc smelter smokestack was 400 feet.) The stacks would be equipped with the lights necessary to facilitate safe operations and to comply with applicable Federal Aviation Administration regulations.

As shown in this view from River Road in Beaver, across from 503 River Road looking southwest, the lights from Beaver County Mall – the two lights on the left side of the photo – are more visible to many of our prospective neighbors than the facility’s lighting would be.

Addressing Community Impacts

If built, the project would strive to eliminate, minimize or manage community impacts. The following are some approaches currently being developed:

- Site selection – Locate the facility in an industrial area near a major interstate and with access to marine, rail and pipelines to help reduce the amount of road travel needed.
- Best management practices – Use industry-standard best practices so that noise levels do not exceed applicable limits.
- Construction noise – Conduct construction activities during daylight hours as much as possible; implement noise reduction measures for activities outside normal working hours.
- Operational noise – Build in various types of noise suppressants such as cladding, enclosures and mufflers.
- Lighting – Limit and localize lighting to levels needed for safety and security; use glare-reduction lights directed downwards.
- View shed – Share depictions of proposed facility from various vantage points with community.
- Traffic controls – Install new traffic lights at key intersections near the project site; use off-duty police as required to direct traffic; assign workers to designated parking areas; and stagger work start times.
- SR18 – Reroute and widen a segment of SR18 approximately 1,000 feet south; two additional temporary lanes would be turned into a permanent shoulder following construction.
- I-376 ramps – Reconfigure I-376 ramps to meet the rerouted SR18 segment and improve flow of traffic on I-376.
- Bridge – Build a bridge over the existing SR18 for truck traffic; employ traffic safety officers to direct traffic so that trucks transporting excavated soil can safely cross SR18 until the bridge is complete.
- Dust management – Implement best management practices to reduce dust generated from construction and traffic, including spraying temporary roads, paving plant roads, rinsing trucks before they leave the site and implementing dust control plans.
- Driver and vehicle safety – Require drivers to follow all traffic safety laws and Shell road safety standards; sponsor awareness programs to promote safe driving behavior among employees and contractors; require driver qualification including safety training, vehicle inspections and maintenance records.
- Information sharing and engagement – Continue to foster two-way conversations with the community so neighbors will know what to expect and the company can answer questions and identify and address potential concerns.

*References to the facility, plant and project contained herein relate specifically to Shell Chemical Appalachia LLC. May 2015
PROPOSED PETROCHEMICAL FACILITY
COMMUNITY IMPACTS

Shell is exploring the possibility of building a petrochemical facility in Beaver County, Pennsylvania, near Pittsburgh. If built, the project would bring a number of economic benefits to the area, but we know that construction and operation of a large manufacturing facility also can pose potential challenges.

As part of Shell’s commitment to being a good neighbor, our goal is to identify the activities that potentially could affect our prospective neighbors and work together to eliminate, minimize or manage, to the extent practical, the inconveniences that can come with a major new development.

UNDERSTANDING POTENTIAL IMPACTS

During the planning and evaluation process, we have been conducting studies and talking with the community about activities that could potentially affect our prospective neighbors. Given the nature of the facility, some typical industrial concerns, such as odor, are not expected to be an issue.

Noise assessment
Shell is in the process of developing noise monitoring and mitigation plans for all phases of construction, facility startup and operations. We are designing the facility to comply with both the Reisterstown and Township ‘no noise’ ordinances, and our goal is to minimize what neighbors would hear both during construction and operations.

Visual assessment
If built, the facility would be located in an area with irregular topography and narrow stream valleys, making it most visible from the north and south banks of the Ohio River. The site has been identified as a century of previous industrial use and is located near ongoing industrial operations including the BASF Monaca Plant and NOVA Chemicals Beaver Valley Plant. Shell conducted an assessment of the area’s existing visual character and how the view could change if the facility is built. The Pennsylvania Historical and Museum Commission has reviewed this information and found that the project would not significantly change the view from natural areas in the view shed with the exception of Marcellus Park No. 3, across the Ohio River from the site. The project will provide agreements to mitigate for this impact.

Transportation planning
Safe access was a key factor in choosing the Beaver County site. The proposed facility would be located along the Ohio River and near a four-lane interstate (I-376) and SR-18 (Frankfort Road) with an existing CSX rail line running through the site. This would allow us to transport equipment and materials by river during construction, and via pipeline and rail once in operation, helping minimize truck traffic. However, we will still expect construction activities to increase traffic in the area as we commissioned a traffic study in 2013 (currently being updated) to provide a baseline for planning infrastructure improvements and measures. Based on these plans, the Pennsylvania Department of Transportation has determined we would meet its guidelines for temporary road impacts during construction and that the proposed road would provide a long-term benefit once construction is complete. Throughout the process, our goal will be to minimize traffic disruptions in the community and support safe travel journeys to and from the site.

CONSTRUCTION

If the project moves ahead, construction from initial site preparation through start-up would take approximately five years.

Early activity would include excavating a large portion of hillside south of the site to relocate a section of SR-18 to provide additional space for construction and a long-term buffer zone for the facility. The excavated material would be spread across the site to cover and stabilize existing soil as part of site remediation efforts permitted by the Pennsylvania Department of Environmental Protection under the requirements of the Pennsylvania Land Recycling Program. This would include restoring portions of Poorhouse and Flag Runs through stream enclosures and, in other areas, stabilizing stream banks.

"DURING CONSTRUCTION, WE WOULD USE ONLY THE LIGHTS REQUIRED FOR SAFETY AND SECURITY. THE GLARE-REDUCTION LIGHTS WOULD BE DIRECTED DOWNWARD TO MINIMIZE LIGHT SPILLOVER TO THE SURROUNDING AREAS."

Neighbors could expect to hear some noise during construction. Foundation and road work, including demolition, excavation and pile driving, are typically the loudest activities; this work is expected to take place over approximately two years. We would work to minimize construction noise, particularly from activities outside normal working hours. We are currently analyzing options to reduce construction noise and we will share those results with the community.

Construction-related increases in traffic can pose challenges including vehicle noise, particularly from heavy-truck and rail; local congestion; and potential road safety concerns. We are estimating up to 600 heavy-truck trips hauling equipment and supplies during peak construction activity, as well as large number of workers traveling to and from the site. We are working with local authorities on infrastructure improvements to enhance transportation safety and minimize congestion, including a relocated and widened section of SR-18, a revamped I-376 interchange, new traffic lights, traffic control officers, staggered work times and assigned parking lots. We also will require drivers and vehicles to meet rigorous safety standards.

In addition, we would take a number of measures to suppress dust and keep roads clear, including paving site roads, spraying water on temporary roads, rinsing heavy trucks before they leave the site, and cleaning mud and dirt off SR-18.

OPERATIONS

Once in operation, the noise from heaters, compressors and generators would be similar to other industrial plants and would be constant throughout the facility’s approximately 40-year operational life. We plan to use mufflers, sound-deadening materials and enclosures, as appropriate, to reduce equipment noise.

Railcars used to transport supplies to the facility and products to customers also would create noise; current plans estimate one to two trains delivering supplies and carrying product to market each day, with frequent shunting, coupling and decoupling of rail cars in the facility’s yard. This would be similar to previous rail operations at the site although on a larger scale.

During facility start-up and maintenance, steam blowing is needed to clean piping and equipment systems for safe operation of the process units. We plan to install silencers, but this activity still will be noisy, creating a low rumble and intermittent hissing frequency similar to a steam engine from the release of steam. If you see white “smoke” above the facility, it is the steam created as hot water cools. It forms condensate, or moisture, that is vented into the air.

While Shell has designed the facility to minimize the use of its elevated flares, the device still provides a critical safety measure and environmental control. After initial plant start-up, we only would expect to need the elevated flare for a major event such as the complete loss of both regional and facility power, perhaps once a decade. When used, the elevated flare can be loud and produces flames visible for long distances.

The map show the location of the proposed facility, located near the I-376 bridge and SR-18, along the Ohio River.

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