DRAFT – May 2011 CMS Report – Suspected Air Deposition and Culvert 105 Study Areas

FMC Corporation Middleport, New York

Executive Summary

This Draft CMS Report is FMC's work product. It was prepared by FMC's team of professionals and experts from inside and outside the company. FMC conferred with the Agencies in preparing the draft report, and attempted to address various comments provided by the Agencies on the draft report. However, FMC understands that the Agencies do not necessarily agree with or accept the various conclusions, determinations, assessments, assertions or judgments which are expressed by FMC throughout this draft report. Many of these instances where FMC has stated its opinion in this draft report are identified by specific text or by a footnote which references this paragraph so as to clearly differentiate such opinions from the factual information provided in the report.

FMC Corporation (FMC) has completed a study of corrective measures alternatives (CMAs) under the terms and conditions of the Administrative Order on Consent (AOC), Docket No. II RCRA-90-3008(h)-0209, effective July 2, 1991, entered into by FMC, the New York State Department of Environmental Conservation (NYSDEC), and the United States Environmental Protection Agency (USEPA) (the latter two entities collectively referred to herein as "the Agencies"). The corrective measures study (CMS) was completed in accordance with the Agencies'-approved August 2009 *Corrective Measures Study Work Plan for Suspected Air Deposition and Culvert 105 Study Areas* (CMS Work Plan) and includes the identification, evaluation, and FMC's justification/recommendation of corrective measures for the Suspected Air Deposition Area South of the Erie Canal and West of the Niagara/Orleans County Line, and Culvert 105 and Flood Zone study areas ("CMS Study Areas").

This report presents the findings of the CMS. After review by the Agencies, a Draft CMS Report will be issued for public comments. The Agencies will hold a formal public comment period and public meeting to present and receive comments on the Draft CMS Report. The Agencies will then respond to comments and will announce the Agencies' preliminary selection of a CMA by means of a "Preliminary Statement of Basis". The Agencies then will hold a second formal public comment period and public meeting on the Preliminary Statement of Basis. After public comments have been received, the Agencies will respond to comments and provide their selection of the final corrective measures for the CMS Study Areas.

After the Agencies select the final corrective measures for the CMS Study Areas, FMC will begin the Corrective Measures Implementation (CMI) phase. This phase includes activities associated with planning, designing, constructing and maintaining the selected remedy, and associated community participation and outreach activities.

Description of CMS Study Areas

FMC owns and operates a pesticide formulating facility located in the Village of Middleport and the Town of Royalton, Niagara County, New York ("Facility" or "Site"). FMC and predecessor companies operated the Facility for the manufacturing and/or formulation of agricultural products since the 1920s. Manufacturing ceased in 1985. Since that time, FMC has only conducted formulating (and packaging) operations. Past

DRAFT – May 2011 CMS Report – Suspected Air Deposition and Culvert 105 Study Areas

FMC Corporation Middleport, New York

releases have resulted in the occurrence of FMC-related contamination at the Facility and the CMS Study Areas. The predominant constituent of concern within the off-Site study areas is arsenic.

In 2009, FMC completed the investigation of (1) the Suspected Air Deposition Area South of the Erie Canal and West of the Niagara/Orleans County Line; and (2) the Culvert 105 and Flood Zone. The results of the investigations are presented in the RCRA Facility Investigation (RFI) Report Volume II – Suspected Air Deposition Study Area 1 (South of the Erie Canal and West of the Niagara/Orleans County Line) and Culvert 105 Study Area South of the Erie Canal) (RFI Report Volume II) dated September 2009 and RCRA Facility Investigation (RFI) Report Volume IV – Culvert 105 and Flood Zone (RFI Report Volume IV), dated September 2009. The Agencies communicated approval of RFI Report Volume II and Volume IV by letters dated October 6, 2009 and September 1, 2009, respectively, and directed FMC to perform a CMS for the areas identified in the approved RFI Report Volume II and Volume IV.

The CMS Study Areas are mostly comprised of residential properties. The remainder of the properties consist of commercial, industrial, agricultural or undeveloped lands, Village of Middleport- and Town of Royalton-owned land (i.e., right-of ways, wastewater treatment plant) and the Royalton-Hartland Central School District (Roy-Hart) property. Culvert 105 is a system (approximately 1.3 miles in length) for the collection and conveyance of municipal stormwater drainage that consists of a combination of buried pipes and open ditches, extending from the FMC-owned North Railroad Property immediately north of the Site to its confluence with Tributary One of Jeddo Creek.

Overview of CMS Activities

As stated in the Agencies'-approved RFI reports and the CMS Work Plan, the CMS considered the following:

- Arsenic is the primary constituent of concern in soil that has/will influence the scope of remedial efforts in the CMS Study Areas.
- Arsenic is a naturally occurring element present in soil as a result of both geological background and use
 of man-made products. In western New York, there is evidence that suggests that arsenical pesticides
 were used in some fruit orchards. Therefore, the local background concentration of arsenic in soil is a
 key consideration in delineation of arsenic concentrations which could potentially be attributable to
 releases from the FMC Facility.
- The CMS Study Areas includes 18 properties with no soil sample data. With agreement by the Agencies, these 18 CMS properties were not included in the estimates of remedial area and soil volume under the CMAs, with the exception of three properties located along the Culvert 105 buried pipe. FMC will offer to perform soil sampling and analysis on the unsampled properties pursuant to a process to be approved by the Agencies. If written permission is obtained from the property owner, then the sampling and analysis would be conducted and, if warranted, FMC would remediate the sampled property consistent with the approved corrective measures.

DRAFT – May 2011 CMS Report – Suspected Air Deposition and Culvert 105 Study Areas

FMC Corporation Middleport, New York

Involvement of the community and affected property owners in the CMS process is critical to the
successful implementation of any corrective measures. As specified in the CMS Work Plan, several
interim deliverables were prepared for review and early input and comments from the Agencies, the
community and/or affected property owners. Comments received on the interim deliverables were
incorporated into the CMS, as appropriate.

The CMS includes community participation activities; FMC's human health and ecological risk assessments; pilot studies for phytoremediation and soil tilling/blending; identification and evaluation of tree preservation measures; evaluation of disposal options for excavated soil and other remediation wastes; development of CMAs; evaluation of the CMAs; FMC's justification and recommendation of a CMA for the CMS Study Areas.

Identification and Screening of Corrective Measures Technologies

CMAs were developed incorporating the following retained corrective measures technologies: no further action; institutional controls; access restrictions; monitoring and maintenance; soil excavation and use of a Corrective Action Management Unit (CAMU) situated on the Site or use of appropriate off-Site disposal facilities; sewer removal/replacement; soil tilling/blending; and tree preservation measures e.g., limited excavation within protected root zone).

Phytoremediation of soil arsenic was evaluated in site-specific pilot studies performed over two growing seasons. The pilot study results indicated minimal arsenic uptake by plants with no measurable drop in the soil arsenic concentrations. In FMC's opinion, phytoremediation is not considered a viable technology for the CMS Study Areas for reasons expressed in the Section 4.2.1 of this report.

An evaluation of tree preservation measures, involving Middleport-specific information and consultation with qualified and experienced experts, was performed in support of the CMS. The results of the evaluation indicate that in certain cases, mechanical methods or pneumatic pressure can be used for excavation to a depth of 6 inches or more over a tree's entire root zone during a single construction season. In FMC's opinion, the ability to excavate soils within the protected root zone successfully to depths greater than 6 inches depends on 1) the vertical and horizontal extent of soil removal required to achieve soil cleanup goals, 2) property-specific factors (i.e., soil characteristics, and owner input), and 3) tree-specific factors (i.e., tree species, age, health, stability, location and condition). The advice of a qualified local arborist relying on site-specific information will be considered during the design phase in the development of soil excavation methods, depths and area required to preserve a tree. Limited excavation (i.e., maximum depth of 6 inches) using either mechanical methods or pneumatic pressure would present the best opportunity to preserve selected trees based upon practicability of implementation, probabilities for tree survivability, tree structural stability concerns, and safety concerns for workers, residents, and the community. The determination of whether a specific tree can or cannot be preserved on any property identified for remediation will be made in consultation with the property owner and the Agencies during the design phase (CMI).



FMC Corporation Middleport, New York

The CMS included an evaluation of the following on-Site and off-Site remediation waste disposal options:

On-Site Disposal Option

The on-Site disposal option consists of constructing and using an engineered consolidation area or CAMU at the eastern portion of the FMC Facility. The proposed CAMU would be used for the permanent management of non-hazardous soils or other non-hazardous materials (collectively referred to as remediation waste) generated in the course of remedial actions from the CMS Study Areas. The proposed CAMU would be constructed in accordance with RCRA regulations to a maximum height of 28 feet (at its highest point from its base elevation) and a maximum footprint (i.e., area at its base) of approximately 16.9 acres on the eastern portion of the FMC Facility. After placing the final cover atop the CAMU, the ground surface would be vegetated with a variety of low-maintenance grasses and shrubs. Trees would be planted at select locations along the perimeter to achieve an appearance consistent with the open, rural, and natural character of the surrounding area,

Off-Site Disposal Options

The possible off-Site disposal options considered in the CMS are as follows:

- <u>Commercial Landfill</u> Off-Site disposal of remediation waste at an appropriate commercial landfill(s) permitted in accordance with applicable rules and regulations (e.g., 6NYCRR Part 360).
- Beneficial Reuse at a Commercial Landfill Beneficial reuse of non-hazardous remediation soil as daily landfill cover at an appropriate off-Site commercial landfill(s) that is permitted in accordance with applicable rules and regulations.

The further options for transport for the off-Site disposal options are as follows:

- <u>Truck Transportation</u> Remediation waste would be transported by truck (e.g., 30-ton capacity) to an appropriately permitted commercial landfill for disposal or beneficial reuse as daily cover.
- <u>Railcar Transportation</u> Remediation waste would be transported by railcars (e.g., 100-ton gondolas or possibly inter-modal containers) to an appropriately permitted commercial landfill for disposal or beneficial reuse daily cover.

A description and evaluation of these disposal options is presented in Appendix D. For the purposes of making detailed comparisons between CMAs, both the CAMU and an off-Site disposal option, consisting of a combination of the aforementioned options, have been included in the CMAs, as described below.



FMC Corporation Middleport, New York

Disposal Options included in the CMAs

- Placement and permanent management of non-hazardous soil and other remediation wastes in a CAMU with a total height of 28 feet from its base elevation. Remediation wastes would be transported from the excavation areas by smaller trucks (12 cubic yard capacity dump trucks required for use on residential streets during the previously completed interim remedial measures) and placed in the CAMU that would be located on the FMC Facility. The CAMU would be used, maintained and closed by FMC in accordance with the plans that would be subject to review and approval by the Agencies. The CAMU would be located in an area of the FMC Facility where there are existing engineering and administrative controls to prevent exposure to or migration of remediation waste. The proposed location for the CAMU includes the Eastern Surface Impoundment (ESI) Fill Area that has been used in the past for the temporary on-Site placement and management of off-Site generated remedial soils in conjunction with Agencies' approval of Interim Corrective Measures (ICMs) or Interim Remedial Measures (IRMs), with final disposition to be determined during the CMS process.
- Off-site disposal at a commercial landfill(s) with beneficial reuse of a portion of the remediation waste as daily cover. This option assumes for the purposes of the CMS that 25% of the remediation waste will be beneficially reused as landfill cover material and 75% of the remediation waste will be disposed in a commercial landfill as non-hazardous solid waste. The material may be transported directly or indirectly (use of temporary remedial soil staging areas at the Site) to the appropriate commercial landfill. For the purposes of this CMS, the transportation option would consist of loading remediation wastes into smaller size trucks for transport to and stockpiling within a temporary staging area located at the eastern portion of the FMC Plant Site. Remediation wastes accumulated in the temporary staging area(s) would subsequently be loaded into larger trucks (e.g., 30-ton capacity) or railcars for transport to the commercial landfill.

Disposal evaluations presented in this CMS are based on truck transport of remediation waste for purposes of making detailed comparisons between CMAs, with the conceptual evaluations of the rail transport options. For reasons described in the CMS Report, including Appendix D, FMC has concluded that rail transport offers no advantages over truck transport at this time. That conclusion was based on FMC's past experience in using rail transport for remediation wastes, consultation with FMC's experts and logistical providers, and the additional considerations presented in Attachment D-2.

Description of the Corrective Measures Alternatives (CMAs)

The CMAs listed below have been identified and developed to address the presence of potentially FMC-related arsenic in the Suspected Air Deposition Study Area and the Culvert 105 Study Area.

• Alternative 1 (also referred to as CMA 1) - No Further Action

DRAFT – May 2011 CMS Report – Suspected Air Deposition and Culvert 105 Study Areas

FMC Corporation Middleport, New York

- Alternative 2 (also referred to as CMA 2) Remediation of soil with arsenic concentrations above 20 mg/kg on each property, including the non-ICM area of the Roy-Hart School property. Appropriate institutional controls would be established on properties with buried pipe sections of Culvert 105 that are not replaced.
- Alternative 3 (also referred to as CMA 3) Remediation of soil on residential properties to a post-remediation average arsenic concentration of 20 mg/kg on each property with a maximum residential property soil arsenic concentration of 40 mg/kg. Post-remediation soil arsenic goals would be higher for nonresidential land usages. Appropriate institutional controls would be established on the following properties: a) the non-ICM area of the Roy-Hart School property; b) properties remediated to non-residential post-remediation soil arsenic goals; and c) properties with buried pipe sections of Culvert 105 that are not replaced.
- Alternative 4 (also referred to as CMA 4) Remediation to a post-remediation average arsenic
 concentration of 30 mg/kg with a maximum concentration of 60 mg/kg. No further action would be
 implemented on the non-ICM area of the Roy-Hart School property. Appropriate institutional controls
 would be established on properties with buried pipe sections of Culvert 105 that are not replaced.
- Alternative 5 (also referred to as CMA 5) Remediation to a post-remediation average arsenic
 concentration of 40 mg/kg on each property and a maximum concentration of 80 mg/kg. No further
 action would be implemented on the non-ICM area of the Roy-Hart School property. Appropriate
 institutional controls would be established on properties with buried pipe sections of Culvert 105 that
 are not replaced.
- Alternative 6A (also referred to as CMA 6A) Remediation of soil on residential, public, and institutional properties to a post-remediation average arsenic concentration of 20 mg/kg on each property with a maximum soil arsenic concentration of 35 mg/kg. Soil remediation levels would be higher for other land usages. Soil remediation of the non-ICM portion of the Roy-Hart School property would not be performed. Appropriate institutional controls would be established on the following properties: a) non-ICM area of the Roy-Hart School property; b) properties remediated to post-remediation soil arsenic goals for agricultural, commercial, industrial, railroad and utility land usages; and c) properties with buried pipe sections of Culvert 105 that are not replaced.
- Alternative 6B (also referred to as CMA 6B) Same as CMA 6A, except that CMA 6B includes remediation of the non-ICM portion of the Roy-Hart School property to the post-remediation soil arsenic cleanup goals for residential and public/institutional properties (20 mg/kg average and a maximum of 35 mg/kg). No institutional controls would be established for the non-ICM portion of the Roy-Hart School property.

DRAFT – May 2011 CMS Report – Suspected Air Deposition and Culvert 105 Study Areas

FMC Corporation Middleport, New York

- Alternative 7A (also referred to as CMA 7A) Same as CMA 6A, except that CMA 7A will have a
 maximum post remediation soil arsenic cleanup level of 30 mg/kg for residential and
 public/institutional properties.
- Alternative 7B (also referred to as CMA 7B) Same as CMA 7A, except that CMA 7B includes
 remediation of the non-ICM portion of the Roy-Hart School property to the post-remediation soil
 arsenic cleanup goals for residential and public/institutional properties (20 mg/kg average and a
 maximum of 30 mg/kg). No institutional controls would be established for the non-ICM portion of the
 Roy-Hart School property.
- Alternative 8 (also referred to as CMA 8) Remediation of all properties, including the non-ICM portion of the Roy-Hart School property, but excluding the Wooded Parcel, to a post-remediation average arsenic concentration of 20 mg/kg and a maximum concentration of 30 mg/kg for each property. CMA 8 also includes removal/replacement of all remaining buried pipe portions of Culvert 105.

Common Elements of the Corrective Measures Alternatives are as follows:

- a. Continued implementation of the Site Management Plan for the Wooded Parcel- The Wooded Parcel was remediated in 2007-2008 and deed restrictions were recorded for the property. Inspection, monitoring and maintenance activities were implemented under an Agencies'-approved Site Management Plan beginning in 2008, and would continue under each of the CMAs. (Note: In January 2011, FMC provided the Agencies with its legal analysis of the Wooded Parcel deed restrictions which indicate that these restrictions cannot be unilaterally removed by the current or any future owner of this parcel. However, if as a result of the ongoing Agencies' review, the permanency of these restrictions cannot be confirmed to the Agencies' satisfaction, other remedial options for this parcel may need to be evaluated.)
- b. No Further Action for Previously Remediated Properties No further action for 31 properties remediated during the 2003 ICM and the 2007-2008 Early Actions for which the property owners received letters from the Agencies stating that no use restrictions were required and that no further sampling or other actions are needed. As stated in the Agencies' letters, the arsenic concentrations in the remaining soil at the remediated properties were consistent with area residential background concentrations and normal sampling and data variability.
- Remediation to CMA-Specific Post-Remediation Soil Arsenic Goals Achieved by soil excavation and removal. Where appropriate, excavation may be supplemented with or replaced with in-place soil tilling/blending.
- d. Remediation Waste Disposal Options On-Site and off-Site waste disposal options, as previously described, are included in the detailed evaluation of the CMAs.

DRAFT – May 2011 CMS Report – Suspected Air Deposition and Culvert 105 Study Areas

FMC Corporation Middleport, New York

- e. Property Restoration Placement of backfill (clean fill soil and top soil, as appropriate) to original grade where soils are excavated. Lawns would be restored by seeding or placement of sod.
- f. Tree Preservation Opportunities to preserve trees would be identified in consultation with the property owner and a qualified local arborist relying on site-specific information during the CMI, after the Agencies select the final corrective measures and soil cleanup goals for the study area. The property owner will have the final decision on whether their property will be remediated and on preservation of trees on their property. During the CMI design phase, FMC will provide the property owner with information needed to make an informed decision concerning tree preservation and FMC's recommendation regarding the viability of preserving the tree(s) within the remediation area.
- g. Property-Specific Features within the Remediation Area Landscaping features, sidewalks, driveways, and other property-specific features (e.g., pools, sheds, fences), would be replaced inkind where removal is necessary. The need for removal of any property-specific features would be determined during the design of the CMI phase, in consultation with the affected property owners and the Agencies.
- h. Culvert 105 Remediation Where soil around Culvert 105 is to be removed, the culvert would be replaced in-kind (either as buried pipe or open ditch) along the existing alignment. CMAs 2 through 7B included remediation (removal and replacement) of buried pipe sections of Culvert 105 to meet the CMA-specific post-remediation soil arsenic goals. CMA 8 assumes remediation along the entire length of the Culvert 105 buried pipe sections that were not installed as part of previous ICMs.
- i. Institutional Controls Would be used to require further evaluation/action by FMC if the property use changes to residential; and/or address intrusive activities that may be conducted on a property using a Site or Soil Management Plan (see note under "a" above).
- j. Remedial Design and Pre-design Activities A remedial design would be required as part of the CMI phase to provide technical drawings, plans and specifications, as well as other project specific plans necessary to implement the CMI construction activities. Pre-design activities necessary to support the remedial design would also be conducted.

The major differences between Alternatives 2 through 8 are:

- number of properties to be remediated;
- volume and extent of soil to be remediated;
- lineal footage of buried Culvert 105 pipe to be removed and replaced;



FMC Corporation Middleport, New York

- · estimated duration of remediation; and
- number of properties requiring institutional controls.

These items have been estimated for each CMA as follows:

СМА	1	2	3	4	5	6A	6B	7A	7B	8
Number of Additional Properties to be Remediated	0	181	152	86	48	157	158	164	165	179
Estimated Additional Volume of Soil to be Remediated (cubic yards)	0	228,000	69,000	38,000	28,000	85,000	98,000	101,000	119,000	162,000
Total Estimated Area of Soil to be Remediated (acres)	0	127	50	26	18	62	73	71	85	104
Estimated Additional Length of Culvert 105 Buried Pipe to be Removed and Replaced (lineal feet)	0	1,325	1,185	900	900	1,185	1,185	1,185	1,185	3,025
Estimated Number of Construction Seasons (May to November) to Complete the Remediation (see Note)	0	10	5	3	2	6	6	7	7	8
Number of Properties Requiring Institutional Controls	0	11	25	14	14	22	21	22	21	0

Note:

CMA Evaluation Criteria

The CMAs were evaluated based on the ability to attain the project-specific Corrective Action Objectives (CAOs) issued by the Agencies using the following criteria specified in the approved CMS Work Plan:

^{1.} The estimated number of construction seasons presented for each CMA in the above table is based on FMC's experience performing remediation on residential properties in Middleport in 2003 and 2007 and assumes a considerable and manageable level of effort during each construction season. The actual number of construction seasons for the selected CMA or CMAs, will be determined during the CMI planning stage through an Agencies' approved schedule.



FMC Corporation Middleport, New York

- 1) Community/Property Owner Acceptance
- Technical (effectiveness, performance, reliability, implementability and safety)
- 3) Environmental (potential short- and long-term beneficial and adverse impacts on the environment)
- 4) Human Health (short-term (i.e., risks during implementation) and long-term (i.e., after implementation)
- Institutional (consideration of federal, state, and local rules and regulations)
- Cost (capital, engineering and long-term operation/maintenance)
- 7) Green Remediation Practices (net environmental benefit)

Summary of FMC's Justification and CMA Recommendation

FMC's recommended CMA for the Suspected Air Deposition and Culvert 105 Study Areas and justification for the recommended CMA are based on the detailed evaluation of alternatives by FMC using the CAOs and the evaluation criteria set forth in the approved CMS Work Plan.

All CMAs result in acceptable long-term human health risks (i.e., for all of the alternatives, 1 through 8, the estimated excess life-time cancer risks are within or below the range of 10⁻⁴ to 10⁻⁶, and the non-cancer hazard indices are below the target value of 1). There is very little difference in the amount of human health risk reduction achieved between the CMAs.¹

All of the CMAs also result in acceptable ecological risks in the Culvert 105 area north of Sleeper Street, the area of focus requested by the Agencies based on the perception that this is the area where the presence of wildlife might be anticipated.^{1.}

The CMAs differ more substantially with respect to the remaining evaluation criteria - i.e., community/property owner acceptance; technical effectiveness, performance, reliability, implementability and safety; the environmental impacts associated with CMA implementation; short-term human health risks associated with CMS implementation; institutional compliance; and adherence to green remediation practices.

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¹ See bolded paragraph at the beginning of this Executive Summary.

DRAFT – May 2011 CMS Report – Suspected Air Deposition and Culvert 105 Study Areas

FMC Corporation Middleport, New York

CMA 1 satisfies more evaluation criteria than any other CMA. However, it does not satisfy the institutional compliance criterion because it is inconsistent with the CAO stating that the "point of departure," or starting point, for corrective action risk-management decisions pertaining to arsenic in soil with respect to residential properties is the site-specific residential background soil arsenic value(s).

CMA 2 satisfies the institutional criterion in part because it adopts the most stringent application of the arsenic concentration (20 mg/kg) that the Agencies have represented as generally being the upper limit of local background level for residential properties. However, CMA 2 is not consistent with CAO No. 1 which requires corrective action decision-making to be based on site-specific data, including current and reasonably anticipated future land use(s). CMA 2 applies a putative residential background value for arsenic in soil to all properties in the CMS Study Areas, including those which are not now and are not reasonably anticipated to be residential. Moreover, in FMC's opinion, apart from very small differences in long-term human health and ecological risk reduction, CMA 2 compares unfavorably to all the other CMAs with respect to the remaining evaluation criteria.

CMAs 3 and 6A through 7B satisfy the institutional criteria and are consistent with the CAOs requiring the use of site-specific residential background for soil arsenic values as the point of departure for corrective action decision-making with respect to residential properties and allowing the use of alternative (higher) values for non-residential properties. These CMAs and CMA 8 were assessed by FMC as moderate for the community/property owner acceptance, technical, and environmental evaluation criteria.

CMA 8 is inconsistent with CAO No. 1 for the same reason that CMA 2 is inconsistent with that CAO¹. CMA 8 applies putative residential background values for arsenic in soil to all properties in the CMS Study Areas, regardless of current and reasonably anticipated future use. CMA 8 is therefore assessed by FMC as unfavorable for the institutional criteria. It is also assessed by FMC as unfavorable for the environmental and short-term safety criteria.

CMAs 4 and 5 do not satisfy the institutional criteria for the same reasons that CMA 1 does not.

CMAs 2 and 8 were assessed by FMC as unfavorable for the green remediation practices criterion, primarily due to the large amount of soil to be remediated and transported under either disposal option. Likewise, CMAs 3 and 6A through 7B were assessed by FMC as unfavorable for the off-Site disposal option, and as favorable for the CAMU disposal option due primarily to the relatively smaller amounts of soil to be remediated and truck loads of material to be transported.

The soil which would be generated by implementation of the CMAs is well-suited to disposal in an on-Site CAMU. The use of the CAMU would essentially entail the relocation of soils that pose no unacceptable

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¹ See bolded paragraph at the beginning of this Executive Summary.

DRAFT – May 2011 CMS Report – Suspected Air Deposition and Culvert 105 Study Areas

FMC Corporation Middleport, New York

human health or environmental risks at their current locations to an on-Site secure unit where they would also pose no unacceptable human health or environmental risks. Considering this, and given the potential cost savings, greater flexibility during construction, lower resource utilization, lower potential for greenhouse gas and particulate emissions, and lower probability of traffic accidents associated with the CAMU option compared to off-Site disposal, FMC recommends use of the CAMU as the disposal option under all of the CMAs. The CAMU also has the added benefit of preserving off-Site commercial landfill space for its intended purpose (i.e., garbage and waste disposal) and is consistent with the industrial use of the property.

On the basis of the detailed evaluation and critical comparison of alternatives, FMC recommends CMA 3 as the preferred final corrective measure and use of a designated CAMU for disposal and management of the remediation waste.

¹ See bolded paragraph at the beginning of this Executive Summary.