

# Administrative Order On Consent

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10, SEATTLE, WASHINGTON

IN THE MATTER OF: )  
)  
ELEMENTAL PHOSPHORUS SLAG ) Administrative Order  
) On Consent  
The Monsanto Company and ) EPA Docket No.  
) 10-96-0045-RCRA  
FMC Corporation, )  
)  
Respondents )  
)  
Proceeding Under Section 7003(a) )  
of the Resource Conservation and )  
Recovery Act, as amended, )  
42 U.S.C \_ 6973(a) )  
\_\_\_\_\_ )

## I. INTRODUCTION

1.1. This Administrative Order on Consent ("Consent Order") is entered into voluntarily between The Monsanto Company, FMC Corporation (individually "Company" and collectively the "Companies") and the United States Environmental Protection Agency ("EPA"). This Consent Order documents the commitment of EPA and the Companies to work together to conduct further studies and implement action as provided in this Consent Order regarding the release of radionuclides associated with elemental phosphorus slag in Southeast Idaho. This Consent Order supersedes the previous agreement in this matter (Administrative Order on Consent No. 1092-11-04-7003) (hereinafter, "Previous Consent Order"). By signing this Consent Order, the Companies consent to issuance of this Consent Order.

## II. JURISDICTION

2.1. This Consent Order is issued under the authority vested in the Administrator of EPA by Section 7003(a) of the Resource Conservation and Recovery Act, as amended, ("RCRA"), 42 U.S.C. \_ 6973(a). This authority was delegated on March 20, 1985 from the EPA Administrator to the Regional Administrators by EPA Delegation No. 8-22-A and C; and further delegated to the EPA Region 10 Director and appropriate Unit Manager, Environmental Cleanup Office, by Regional Redelegation.

2.2. Each Company agrees to undertake all actions required of it by this Consent Order. In any action by EPA or the United States to enforce the terms of this Consent Order, the Companies agree not to contest the authority or jurisdiction of EPA to issue or enforce this Consent Order or its terms.

## III. PARTIES BOUND

3.1. This Consent Order shall apply to and be binding upon EPA and upon the Companies, their successors and assigns. No change in the ownership or corporate or other legal status of the Companies shall alter their responsibilities under this Consent Order.

3.2. Each Company shall provide a copy of this Consent Order to all contractors, subcontractors, laboratories, and consultants retained to conduct any work under this Consent Order, and to any subsequent owners of or successors to 25% or more of the outstanding shares of the Company or 10% of

the total assets of the Company. The Companies shall condition any contracts to conduct any work under this Consent Order upon satisfactory compliance with this Consent Order. Notwithstanding the terms of any contract, the Companies are responsible for compliance with this Consent Order and for ensuring that their subsidiaries, employees, agents, contractors, consultants, subcontractors, and attorneys comply with this Consent Order.

#### **IV. PURPOSE AND OBJECTIVES**

4.1. In entering into this Consent Order, the general mutual objective of EPA and the Companies is to protect the public health or welfare or the environment with regard to the release of radionuclides in the environs within Southeast Idaho. Specifically, the mutual purposes and objectives of the parties are: (A) To use the methods developed under the Previous Consent Order to study the risk, if any, to exposed individuals from radionuclide releases in Southeast Idaho associated with elemental phosphorus slag, including determining as precisely as possible the level of such releases, and individual radiological exposures to slag-containing materials; and (B) To provide the parameters under which the Companies will take action to reduce radiological exposures associated with the use of elemental phosphorus slag in southeast Idaho in accordance with the Graded Decision Guidelines ("GDGs") that were developed as described in the Previous Consent Order.

#### **V. DISCLAIMER**

5.1. By signing this Consent Order and taking actions under this Consent Order, the Companies do not necessarily agree with EPA's Findings of Fact, Conclusions of Law or Determinations. Further, acts pursuant to this Consent Order by the Companies shall not be considered an admission of liability for any purpose in any proceedings, and are not admissible as evidence against the Companies in any judicial or administrative proceeding other than a proceeding by the United States, including EPA, to enforce this Consent Order. The Companies agree not to contest the validity or terms of this consent Order in any action brought by EPA to enforce this Consent Order.

#### **VI. EPA FINDINGS OF FACT**

6.1. Based on information available to EPA and for the purposes of this Consent Order, EPA makes the following Findings of Fact:

1. The Monsanto Company and FMC Corporation operate elemental phosphorus manufacturing facilities respectively in Soda Springs, Idaho and Pocatello, Idaho. Elemental phosphorus slag ("slag") is a byproduct of the operation of those facilities.
2. The Monsanto Company is a Delaware Corporation authorized to do business in the state of Idaho. FMC Corporation is a Delaware Corporation authorized to do business in the state of Idaho. Mailing addresses for the purposes of this Order are:

Bruce Pallante, Plant Manager Monsanto Chemical Company  
Soda Springs Plant Post Office Box 816 Soda Springs, Idaho  
83276

Paul R. Yochum, Plant Manager FMC Corporation Post Office  
Box 4111 Pocatello, Idaho 83202

3. The slag has been used in residential construction; as paving aggregate for highways, streets and sidewalks, including most of the streets in the cities of Soda Springs and Pocatello; airport tarmacs; in roofing materials; construction fill; and other uses in Southeast Idaho.
4. The State of Idaho prohibited the use of slag for residential construction in 1976. Immediately thereafter, the Companies voluntarily

suspended the use of slag in the construction of all inhabited buildings. Slag continued to be sold and used for other purposes such as road construction.

5. In 1977 and 1978, the Idaho Department of Health and Welfare ("IDHW") conducted a gamma survey ("Peterson Survey") in areas of southeast Idaho, primarily Soda Springs and Pocatello, where slag construction was prevalent. Gamma readings associated with many residential properties in Soda Springs exceeded 20 uR/hr, a level which may pose a public health concern (40 C.F.R. \_ 192.12(b)(2)).
6. EPA's Idaho Radionuclide Study ("Idaho Study") issued in April 1990, estimated radiation doses to populations in Soda Springs and Pocatello from a variety of area sources. The study concluded that the "primary source of gamma radiation in both Pocatello and Soda Springs is radioactive slag, a residue from phosphate industry processes." The Idaho Study further concludes that "exposure to outdoor sources is the greatest contributor to the population dose in Pocatello, due to slag used in street paving, while that to the residents of Soda Springs is mostly due to indoor (home) exposure, caused by slag in home foundations." EPA determined on the basis of the Idaho Study that there was a need to conduct additional sampling and monitoring to determine individual radiation exposures associated with past uses of slag in Southeast Idaho.
7. Following the release of the Idaho Study, the Companies voluntarily suspended the sale of slag for all construction uses pending the resolution of issues regarding the past and future use of slag.
8. The Shoshone-Bannock Tribes passed a resolution in 1990 prohibiting the use of slag on reservation lands.
9. The EPA Science Advisory Board ("SAB") issued a letter report on January 21, 1992, to the EPA Administrator regarding the Idaho Study. The report recognized that "gamma- radiation exposure levels from elemental phosphorus slag can reach 60-65 uR/hr in some areas, which is 4-5 times the background level prevalent in Southeast Idaho." Further, the report recognized that "elevated gamma radiation levels occur in Pocatello and Soda Springs such that some persons could receive doses above the widely accepted population exposure guide of 100 millirems per year in excess of natural background".
10. The SAB recommended that EPA: (i) "work with local and state officials, the public and industry to make measurements for individuals based on their particular exposure conditions;" (ii) "establish a set of graded decision guidelines based on technical and economic factors for both short-term and long-term exposure of the public due to past uses of slag;" and (iii) "make risk assessments for those persons exposed within the decision guidelines and provide them with information for making informed decisions."
11. A draft 1992 EPA report on diffuse Naturally Occurring Radioactive Materials (NORM) waste estimated the 70-year lifetime risk of acquiring a fatal cancer from one year of exposure to slag in building materials (average estimated concentration of 33 picoCuries/gram for Radium-226), exclusive of the radon inhalation pathway, to be approximately four (4) in 1000 for average persons in the critical population group.
12. Notice of this Consent Order has been given to the State of Idaho and the Shoshone-Bannock Tribes.
13. Based on (i) information provided by the affected communities and by the Technical Work Group established under Section 10 of the Previous Consent Order, (ii) the work plans and reports that the Companies developed pursuant to the Previous Consent Order; (iii)

pertinent radiation protection principles and applicable or relevant and appropriate laws and promulgated regulations, including the BEIR (Biological Effects of Ionizing Radiation) V Report and ICRP (International Committee on Radiation Protection) 60; and (iv) the SAB recommendations referenced in Sections 6.1.I. and J. of this Consent Order; EPA has finalized Graded Decision Guidelines ("GDGs") (Attachment "1") that recommend potential actions for ranges of radiological exposures from slag in Southeast Idaho.

14. The Companies have completed the methods development activities required under Section IX of the Previous Consent Order. These activities involved the development of techniques to measure individual radiological exposures from elemental phosphorus slag, and included preparation and submittal of a Methods Development Work Plan and submittal of a Methods Development Study Final Report. EPA has reviewed and approved both of these documents. The Companies also have prepared, and EPA has approved, an Exposure Study Work Plan (Attachment "2") that sets forth protocols and schedules for evaluating radiological exposures in Southeast Idaho communities where elemental phosphorus slag has been used. Completion of these methods development studies and work plans provides the basis for accurately assessing individual exposures and identifying appropriate action pursuant to the GDGs. The Companies have prepared and submitted to EPA a Graded Decision Guidelines Implementation Plan ("GDG Implementation Plan") (Attachment "3") that describes the procedures the Companies will follow to carry out the options specified in the GDGs. EPA has reviewed and approved this GDG Implementation Plan.

#### **VII. EPA CONCLUSION OF LAW**

7.1. The radionuclide-bearing slag generated by the Companies' elemental phosphorus manufacturing plants is a "solid waste" as defined in Section 1004(27) of RCRA, 42 U.S.C. \_ 6903(27).

#### **VIII. DETERMINATION**

8.1. EPA has determined that the handling or use of slag as a construction material in buildings, roads and other construction in Southeast Idaho may present an imminent and substantial endangerment to public health or the environment. EPA also has determined that the actions specified in this Consent Order constitute reasonable and appropriate measures to reduce radiological exposures from slag.

#### **IX. WORK TO BE PERFORMED**

9.1. The activities conducted under this Consent Order are subject to EPA approval and shall be conducted in accordance with applicable or relevant and appropriate laws, regulations, EPA guidance, policies and procedures.

9.2. Within thirty (30) days after the effective date of this Consent Order, each Company shall initiate the activities specified in the Exposure Study Work Plan (these activities are referred to herein as the "Exposure Study") and the GDG Implementation Plan. These activities will include (i) seeking the voluntary consent of property owners in Soda Springs, Pocatello and Fort Hall to participate in the Exposure Study, (ii) offering to carry out the options specified in the GDGs with respect to properties owned by study participants as described in Section 9.5 of this Consent Order, and (iii) locate slag in the communities. Each Company shall prepare reports regarding the results of these studies, and submit such reports to EPA and other entities as appropriate, in accordance with this Consent Order and the schedules and other relevant requirements set forth in the Exposure Study Work Plan and the GDG Implementation Plan.

9.3. EPA acknowledges that the Companies have entered into a Memorandum of Agreement ("MOA") (Attachment "4") with the Southeast Idaho District Health Department ("Health Department") under which the Health Department will carry out significant aspects of the Exposure Study and GDG implementation.

Notwithstanding this MOA, the Companies shall remain responsible for carrying out all the actions that are required of them by this Consent Order.

9.4. All Attachments to this Consent Order, including any schedules, attachments or amendments thereto, are incorporated into and made an enforceable part of this Consent Order by this reference.

9.5. Each Company shall take action as specified in this Consent Order with respect to the properties that are evaluated in the Exposure Study. The Companies shall implement such action upon the request of the owner(s) and occupier(s), or occupier(s) alone if such occupier(s) have authority from the owner(s) to request such action, of affected properties after identifying any radiological exposures that (i) are within the ranges for which the GDGs recommend risk reduction measures and (ii) include a reducible dose from slag as defined in Section IV.6 of the GDGs that is equal to or greater than the threshold established by the GDGs. The action shall consist of one or more of the risk reduction options specified in Section V of the GDGs for the exposure levels found at that location. As stated in Section IV of the GDG Implementation Plan, the Companies acknowledge that implementation will require flexibility. The Companies agree to consider other options in good faith in the event of special, unanticipated or unusual circumstances or if a property owner or occupier is dissatisfied with the options that are offered. If (i) an owner cannot be located or (ii) an owner consents and an occupier does not consent to performance of the Exposure Study or implementation of action recommended by the GDGs, the affected Company shall notify EPA promptly and take reasonable efforts to locate the property owner or obtain the occupier's consent as appropriate.

9.6. Each Company shall ensure that an inventory of slag is established and maintained as described in the GDGs and the Exposure Study Work Plan. Residences will not be included in this inventory upon the request of property owner(s). Non-residential premises will be listed in this inventory if they are found to have exposures above the relevant threshold established by the GDGs; the owners of such premises shall consent to such potential listing as a condition of their agreement to have their premises evaluated during the Exposure Study.

9.7. Within six (6) months after the issuance of this Consent Order, each Company shall prepare an interim report summarizing the activities it has performed in carrying out the study and implementing the GDGs and submit the report to EPA for review and approval.

9.8. As EPA may prescribe, at intervals of not less than twelve (12) months following submittal of the interim report referenced in Section 9.6 above, and continuing not later than the date the work under this Consent Order is completed pursuant to Section 28.1, each Company shall prepare a summary report regarding its performance of the Exposure Study and the GDG Implementation Plan, and submit such report to EPA for its review and approval.

9.9. Monsanto shall be solely responsible for conducting the Exposure Study, carrying out the GDG Implementation Plan and making required reports and submittals regarding such activities with respect to Soda Springs and environs nearest thereto. FMC similarly shall be solely responsible for conducting the Exposure Study, carrying out the GDG Implementation Work Plan and making required reports and submittals regarding such activities with respect to Pocatello and Fort Hall and environs nearest thereto.

9.10. Progress reports shall be submitted by each Company to EPA on or before the tenth (10th) day of each month following the month in which this Consent

Order is issued. Each Company shall continue making such reports until the date the work under this Consent Order is completed pursuant to Section 28.1. Upon written approval by EPA, these progress reports may be submitted on a less frequent basis than monthly or the requirement to submit these progress reports may be terminated at some point before the completion of work pursuant to Section 28.1.

9.11. At EPA's direction, each Company shall fully correct and modify any deliverable for which it is responsible pursuant to this Consent Order and incorporate and integrate all information and comments supplied by EPA in either a subsequent or resubmitted deliverable within fourteen (14) days after receipt of EPA comments, or such longer or shorter time as EPA may specify. At the time the revised deliverable is submitted, the affected Company shall submit a cover letter describing how each EPA comment was addressed along with a statement certifying that no other changes were made to the deliverable. Failure to fully modify and correct any deliverable in accordance with this paragraph shall constitute noncompliance with this Consent Order. In addition, EPA may modify unilaterally any deliverable, and each Company shall take action in accordance with such modified deliverable.

9.12. Neither failure of EPA to expressly approve or disapprove a plan, report, deliverable, or any other submission within a specified time period, nor the absence of EPA comments, shall be construed as approval by EPA. All approvals by EPA shall be in writing.

#### **X. TECHNICAL WORK GROUP**

10.1. The implementation of studies and graded decision guidelines as described in this Consent Order may raise complex technical and/or socioeconomic issues. EPA and the Companies established a Technical Work Group ("TWG") in the Previous Consent Order to assist them in addressing these matters. Upon EPA request, this TWG will provide assistance regarding the design and implementation of the actions to be taken pursuant to this Consent Order.

#### **XI. ADDITIONAL WORK**

11.1. If at any time before the termination of this Consent Order, either Company identifies a need for additional data or work, the Company shall submit a memorandum documenting the need for additional data or work to the EPA Project Coordinator within seven (7) days after such identification.

11.2. If EPA determines that other investigative tasks, in addition to the tasks defined in this Consent Order or EPA-approved Work Plans required by Section IX above, are necessary to accomplish the purpose and objectives of this Consent Order, EPA will notify one or both Companies as appropriate in writing of the additional tasks to be performed. Each affected Company shall either confirm its willingness to perform the additional tasks in writing to EPA within fourteen (14) days after receipt of the EPA notice, or invoke the dispute resolution provisions in Section XIX of this Consent Order. Subject to the resolution of any dispute, each affected Company shall implement the additional tasks which EPA determines to be necessary. The additional tasks shall be completed according to the standards, specifications, and schedule set forth or approved by EPA. At any point, EPA may conduct any tasks itself, seek reimbursement of response costs from each affected Company, and/or seek any other appropriate relief.

#### **XII. QUALITY ASSURANCE**

12.1. Throughout all sample collection, transportation, and analysis activities conducted pursuant to this Consent Order, the Companies shall use procedures for quality assurance ("QA"), quality control ("QC"), and for chain-of-custody in accordance with approved EPA methods. The Companies shall

require each laboratory used to perform any work related to this Consent Order to employ approved EPA methods, and to participate in a QA/QC program equivalent to the EPA QA/QC program and to be consistent with the EPA document, QAMS 005/80. The Companies have submitted and EPA has approved a QA/QC plan for the Exposure Study as part of its approval of the Exposure Study Work Plan referenced in Paragraph 9.2 above. All field work and sampling activities conducted by or on behalf of the Companies under the Exposure Study Work Plan shall comply with this QA/QC plan and with any EPA-approved amendments thereto.

#### **XIII. AVAILABILITY OF DATA**

13.1. The Companies shall submit quality assured results of all sampling, tests, and other data generated by the Companies pursuant to this Consent Order to EPA and IDHW within seven (7) days after QA/AC review is completed, but in no event later than thirty (30) days after sampling or field testing, in accordance with the EPA-approved work plans. All raw data generated pursuant to this Consent Order shall be made available to EPA or IDHW upon request. The deadlines established in this paragraph may be extended by the EPA Project Coordinator in writing upon request by either Company.

13.2. The information that the Companies will provide to EPA pursuant to this Consent Order is anticipated to include information regarding actual and potential radiological exposures to individuals at specific residences in the study area. Unless directed otherwise by a court of competent jurisdiction, EPA shall, in the interests of rights of privacy of such individuals, withhold such information from public disclosure to the fullest extent of applicable law.

13.3. Quality assured information, including quality assured data generated pursuant to this Order but excluding the information described in Paragraph 13.2 above, shall be provided to the affected communities, including individual homeowners, as soon as practicable following EPA review. Unless directed otherwise by a court of competent jurisdiction, EPA and the Companies shall provide information regarding the radiological exposures found at specific residences only to (i) the owner(s) and occupier(s) of such residences, (ii) the Health Department and (iii) any other persons or entities whom the homeowners may designate in writing.

#### **XIV. ACCESS**

14.1. The Companies will obtain or use best efforts to obtain written access agreements from all owners of inhabited dwellings, or those with a possessory interest in such dwellings, to be tested, at least twenty (20) days prior to the time access is needed.

#### **XV. CONTRACTORS**

15.1. All work performed under this Consent Order shall be under the direction and supervision of qualified personnel. Not later than fourteen (14) days after the effective date of this Consent Order, and before any work begins, each Company shall notify EPA, in writing, of the names, titles, and qualifications of the personnel, including contractors, subcontractors, consultants, and laboratories, to be used in carrying out such work. The qualifications of the persons undertaking the work for each Company shall be subject to EPA's review for verification that such persons meet appropriate technical background and experience requirements. If EPA notifies a Company in writing that any such person(s) are not adequately qualified, the Company shall replace said person(s), and shall notify EPA of the identity and qualifications of replacement(s) within seven (7) days after the notice. If EPA subsequently finds the replacement(s) to be less than adequately qualified, the affected Company shall have failed to comply with this Consent

Order and EPA may conduct all or part of the work, seek reimbursement of costs and/or payment of penalties from such Company, or take any other actions authorized by law. During the course of the work, each Company shall notify EPA in writing seven (7) days in advance of any changes in, or additions to, the personnel used to carry out the work, including their names, titles, and qualifications. EPA shall have the rights set forth in this paragraph to review the qualifications of all new or replacement personnel.

#### **XVI. DESIGNATED PROJECT COORDINATORS**

16.1. Not later than five (5) days after the effective date of this Consent Order, each Company and EPA shall designate a Project Coordinator. Each Project Coordinator shall be responsible for overseeing his/her principal's implementation of this Consent Order. To the extent possible, all communication between the Parties (including letters, reports, etc.) concerning activities related to this Consent Order shall be directed to the Project Coordinators.

16.2. The Project Coordinators for each Company shall be qualified, competent persons with experience in waste site investigations, and shall have the skills necessary to direct and supervise the activities described in this Consent Order. Upon selection of a Project Coordinator or any replacement thereof, each Company shall submit written notice of the Project Coordinator's qualifications to EPA.

16.3. The Parties may change their Project Coordinator by sending written notification to the other Project Coordinators no later than five (5) days before such change.

16.4. The Project Coordinator designated by EPA shall have the authority described in the National Contingency Plan ("NCP"), 40 C.F.R. Part 300, as amended, for a Remedial Project Manager or On-Scene Coordinator.

#### **XVII. DOCUMENTS**

17.1. All documents transmitted to EPA, including all deliverables and correspondence, related to this Consent Order, shall be delivered to the EPA Project Coordinator, and to such other persons as EPA may specify in writing consistent with the provisions of Sections 13.2 and 13.3 of this Consent Order.

17.2. Each Company shall preserve, for a minimum of five (5) years after EPA approval of the Company's certification of completion of the matters covered by this Consent Order, all records and documents in its possession or control, or which come into the control of its employees, agents, accountants or contractors which relate to work performed pursuant to this Consent Order, despite any record destruction policy to the contrary. Each Company shall notify EPA in writing at least sixty (60) days prior to the destruction of any such records or documents or of its intent to destroy such records or documents after the five (5) year period specified in this paragraph.

17.3. Within ten (10) days after a request by EPA, each Company shall submit to EPA copies of any draft and final plans, draft and final task memoranda, including memoranda recording field modifications, recommendations for further action, quality assurance memoranda and audits, drafts and final reports, raw data, field notes, laboratory analytical reports, and any other documents related to activities planned or undertaken by the Company which relate to this Consent Order. At the time of any such EPA request, the Companies may withhold documents only by asserting, with sufficient justification, that such documents are legally privileged. Such assertion and justification may be challenged by EPA in the proper judicial forum.

17.4. Each Company may assert a claim of business confidentiality or other claim for confidentiality for part or all of the information it submits to

EPA pursuant to this Consent Order. This claim shall be asserted and the information protected in the manner described in 40 C.F.R. \_ 2.203(b). If no such claim accompanies the information when it is submitted to EPA, it may be made available to the public by EPA without further notice to the Companies. The Companies shall not assert any confidentiality claim with respect to any sampling or monitoring data, except as provided under Sections 13.2 and 13.3 of this Consent Order.

#### **XVIII. DELAY AND FORCE MAJEURE**

18.1. "Force Majeure," for purposes of this Consent Order, is defined as any event arising from causes entirely beyond the control of the Companies and of any entity controlled by the Companies, including their contractors and subcontractors, that delays the timely performance of any obligation under this Consent order notwithstanding the Companies' best efforts to avoid the delay. The requirement that the Companies exercise "best efforts to avoid the delay" includes using best efforts to anticipate any potential Force Majeure event (a) as it is occurring, and (b) following the potential Force Majeure event, such that the delay is minimized to the greatest extent practicable. Examples of events that are not Force Majeure events include, but are not limited to, increased costs or expenses of any work to be performed under this Consent Order, financial difficulty, normal climatic or precipitation events, or failure of a contractor or subcontractor to perform the obligations under this Consent Order.

18.2. If any event occurs which causes delay in the achievement of any of the requirements of this Consent Order, the affected Company shall, no later than twenty-four hours after the occurrence of such event, notify EPA orally of the occurrence and delay. Within seven (7) days after such event, the affected Company shall notify EPA in writing of the nature of the delay, the anticipated duration and cause of the delay, the measures taken and to be taken to prevent or minimize the delay, and the schedule to mitigate the effect of the delay. The Companies shall exercise best efforts to avoid or minimize any delay and the adverse effects of any such delay on the activities that are required under this Consent Order.

18.3. If EPA agrees that the delay or anticipated delay is attributable to Force Majeure, the time for performance of the obligations under this Consent Order that are directly affected by the Force Majeure event shall be extended by agreement between EPA and each affected Company for a period of time not to exceed the actual duration of the delay caused by Force Majeure event. An extension of the time for performance of the obligation directly affected by the Force Majeure event shall not, of itself, extend the time for performance of any subsequent obligation.

18.4. If EPA does not agree that the delay or anticipated delay has been or will be caused by a Force Majeure event, or does not agree on the length of the extension, the issue shall be subject to the dispute resolutions procedures set forth in this Consent Order. In any such proceeding, the affected Company or Companies shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a Force Majeure event, that the duration of the delay was or will be warranted under the circumstances, that the Companies did exercise or are exercising due diligence by using their best efforts to avoid and mitigate the effects of the delay, and that the Companies have complied with the requirements of this section.

#### **XIX. DISPUTE RESOLUTION**

19.1. Any dispute under this Consent Order may be addressed through the dispute resolution procedures of this section, whether or not specifically authorized by the provisions of this Consent Order.

A. For Disputes Between EPA and the Companies

19.2. If a dispute arises under this Consent Order, the affected Company or Companies (hereinafter "Companies" for purposes of this Paragraph) shall notify EPA's Project Coordinator in writing by certified mail, return receipt requested, of the dispute within fourteen (14) days after receipt of notice from EPA of any deficiency, or that any requirement has not been met. The Companies' written notice shall define the dispute, and state the basis of the Companies' position. EPA and the Companies then shall have fourteen (14) days from EPA receipt of the Companies' notice to attempt in good faith to resolve the dispute. If agreement is reached, the resolution shall be set forth in a written statement, signed by the Parties, and incorporated into this Consent Order. If agreement is not reached within this fourteen (14) day period, the EPA Region 10 Director of the Office of Environmental Cleanup shall provide a written statement of his or her decision to the Companies which shall be incorporated into this Consent Order. For those matters which involve technical or scientific issues, EPA may consult with the TWG prior to issuing its decision. Within seven (7) days after receipt of EPA's written decision, the Companies shall advise EPA in writing whether they will implement EPA's decision. Failure by the Companies to implement the decision is non-compliance with this Consent Order, and EPA may elect to implement the decision, or take any other action it may deem necessary within its authority.

19.3. These dispute resolution procedures shall not provide a basis for delay of any activities required by this Consent Order, unless the EPA Project Coordinator agrees in writing to a schedule extension or alteration.

B. For Disputes Between Property Owners/Occupiers and the Companies

19.4. If a dispute arises between a Company and an owner or occupier (hereinafter in this Subsection, "owner") of property that is being or has been evaluated in the Exposure Study, the Company will attempt to resolve the dispute informally. These informal procedures will include discussions and meetings as appropriate between the Company and the owner. Upon being notified by an owner that a dispute exists, the Company will notify the owner that he or she may consult not only with the Company and its representatives regarding the matter but also with EPA and the Health Department. The Company similarly will have the option of consulting with EPA and the Health Department.

19.5. The following procedures will apply in the event the Company and owner are unable to resolve a dispute informally within sixty (60) days after the date the Company receives notice of the dispute. For disputes regarding the Exposure Study at the owner's property, the Company will perform another exposure evaluation at the owner's request. Any additional retests that the owner may request will be performed at the option of the Company. For disputes regarding the appropriate application of the GDGs at the owner's property, either party may request after completion of the risk reduction evaluation that the matter be resolved through binding arbitration. Such arbitration may commence before the expiration of the 60-day period upon the mutual consent of the owner and the Company. Informal discussions between the Company and the owner may continue despite any request for arbitration. The Company will notify EPA promptly in the event arbitration procedures are initiated.

19.6. Any such arbitration shall take place in Soda Springs, Fort Hall or Pocatello, Idaho, whichever is the location of or nearest to the property at issue. The arbitrator shall be a neutral third party experienced as an arbitrator, former judge or similar decision-maker who is knowledgeable on environmental matters and who never has served as an employee of, or contractor or consultant to, the Company or the owner. The Companies will develop a list of at least five potential arbitrators, which also sets forth

the qualifications and employment history of each candidate arbitrator, and provide this list to EPA for review within sixty (60) days after the effective date of this Consent Order. The Companies will remove candidate arbitrators from this list upon the request of EPA. The Companies then shall revise the list to include substitute arbitrators and provide the revised list to EPA for its review. Owners will be given this list and the complete information supplied to EPA on the candidate arbitrators' qualifications to assist them in selecting an arbitrator.

19.7. In the event the owner cannot agree to an arbitrator from the above-described list, the owner shall provide the Company and EPA with a list of other qualified neutral persons whom the owner would accept as arbitrators, including information on their qualifications and employment history. If the Company cannot agree to an arbitrator from this list, the Company and the owner will request the American Arbitration Association (AAA) to provide them with a list of at least five (5) neutral and qualified persons who could serve as arbitrators. The Company and the owner will attempt in good faith to agree on an arbitrator from the AAA list: if they cannot reach such an agreement, the AAA shall have the power to appoint an arbitrator from the list it submitted. The Company shall pay any costs associated with having AAA prepare a list of candidate arbitrators or selecting an arbitrator from this list.

19.8. In the arbitration proceeding the parties may offer such facts and information that are relevant to the dispute, and shall produce such evidence as the arbitrator may deem necessary to an understanding and determination of the dispute. The arbitrator shall consider the facts and information presented by the Company and the owner and in this Consent Order and issue a decision regarding the appropriate risk reduction action at the property. The Company will pay all of the arbitrator's fees and expenses, all of the costs associated with the facilities that are used for the arbitration, and all of the costs associated with creating a record of the arbitration proceeding. The arbitrator will issue his or her decision in writing. The arbitrator's decision, as may be modified as a result of the reconsideration procedure described in Paragraph 19.9 below, will be final and binding on the Company and the owner.

19.9. Within thirty (30) days after the date of the arbitrator's decision, the owner or the Company may request that EPA review the decision. EPA then will review the information that the owner and the Company submitted for the arbitrator's consideration, and any other relevant information that EPA may deem appropriate. If EPA determines that not all the relevant facts and information were presented at the arbitration, then EPA will so inform the owner and the Company within ninety (90) days of receiving the request for review. Within thirty (30) days after being informed of any such EPA determination, the owner or the Company may request that the arbitration proceeding be re-opened to consider the results of the EPA review. EPA shall have the option of presenting the results of its review directly in the re-opened arbitration proceeding. The arbitrator thereafter will issue a written decision that either confirms or revises his or her original decision in the matter.

#### **XX. STIPULATED PENALTIES**

20.1. For each day that a Company fails to timely produce a document listed in Paragraph 20.2 below that is of acceptable quality, or otherwise fails to perform in accordance with the requirements of this Consent Order, such Company shall pay stipulated penalties. Penalties shall begin to accrue on the day that performance is due or a violation occurs, and shall extend until such time as acceptable performance occurs. Any stipulated penalties for failure to meet requirements for carrying out the Exposure Study Work Plan or the Graded Decision Guidelines Implementation Work Plan or to make required

reports pertaining to the areas for which The Monsanto Company has responsibility under Paragraph 9.9 shall be the separate responsibility of The Monsanto Company; any stipulated penalties for failure to carry out these requirements with respect to the areas for which FMC Corporation has responsibility under Paragraph 9.9 shall be separate responsibility of FMC Corporation.

20.2. Stipulated penalties shall accrue in the following amounts for each day of non-compliance as follows:

For failure to submit the interim or periodic reports as required pursuant to Paragraphs 9.6 and 9.7

<b>Period of Failure</b>	<b>Penalty Per Violation Per Day</b>
first seven (7) days	\$200 per day
days eight (8) - fifteen (15)	\$500 per day
days sixteen (16) - thirty (30)	\$2,000 per day
days thirty-one (31) - ninety (90)	\$5,000 per day

For failure to submit the reports, memoranda and other documents that may be required pursuant to the Exposure Study Work Plan or the GDG Implementation Plan, and failure to meet any other Consent Order requirements

<b>Period of Failure</b>	<b>Penalty Per Violation Per Day</b>
first seven (7) days	\$250 per day
days eight (8) - fifteen (15)	\$1,000 per day
days sixteen (16) - thirty (30)	\$3,000 per day
days thirty-one (31) - ninety(90)	\$7,500 per day

20.3. The Companies shall make all payments by forwarding a check payable to the "Hazardous Substance Superfund" to:

Mellon Bank U.S. EPA Region 10 ATTN: Superfund Accounting P.O. Box  
360903M Pittsburgh, Pennsylvania 15251

Checks shall also state "Southeast Idaho Slag," the EPA Identification number 10-J1, and the EPA docket number of this Consent Order. A copy of the check and transmittal letters shall be sent to the EPA Project Coordinator.

20.4. Payment shall be due within thirty (30) days after receipt of a demand letter from EPA. The affected Company or Companies shall pay interest on any unpaid balance, which shall begin to accrue at the end of the thirty (30) day period, at the rate established by the U.S. Department of Treasury.

#### **1. REIMBURSEMENT**

21.1. After the anniversary each year in which this Consent Order is in effect, EPA shall give the Companies an accounting of costs incurred by the United States in connection with this Consent Order. Such costs shall include all direct and indirect costs incurred by the United States in overseeing the Companies' implementation of the requirements of this Consent Order, including but not limited to contractor costs, cooperative agreement costs, compliance monitoring, including the collection and analysis of split samples, inspections, visits, discussions regarding disputes that may arise regarding this Consent Order, review and approval or disapproval of submissions, conduct of community relations activities, costs incurred to obtain access, and costs of doing or redoing any of the Companies' tasks. Summaries, including EPA's certified Superfund Cost Organization and Recovery Enhancement System (SCORES Report), or other summaries as certified by EPA, may serve as a basis for payment demands by EPA. The Companies may, upon request, review the following EPA oversight cost documentation: EPA personnel timesheets, travel authorizations and vouchers, EPA contractor monthly invoices, and all applicable contract laboratory program ("CLP") invoices.

21.2. As the Exposure Study and GDG implementation proceed, EPA will re-evaluate periodically its role with respect to these activities and determine what, if any, further EPA oversight is required.

21.3. For all payments under this section, the Companies shall remit checks, made payable to the "Hazardous Substance Superfund" to the following address or such other address as EPA may designate, in writing:

Mellon Bank U.S. EPA Region 10 ATTN: Superfund Accounting P.O. Box  
360903M Pittsburgh, Pennsylvania 15251

Checks shall also state "Southeast Idaho Slag," the EPA Identification number 10-J1, and the EPA docket number of this Consent Order. A copy of the check and transmittal letters shall be sent to the EPA Project Coordinator.

21.4. Payment shall be due within thirty (30) days after receipt of the bill from EPA. The Companies shall pay interest on any unpaid balance, which shall begin to accrue on the date of receipt of the bill, at the rate of interest on investments for the Hazardous Substances Superfund in Section 107(a) of CERCLA, 42 U.S.C. \_ 9607(a).

21.5. Disputes concerning costs for which reimbursement is sought after the effective date of this Consent Order shall be limited to accounting errors and the inclusion of costs outside the scope of this Consent Order, or which are other than "not inconsistent with the NCP." The Companies shall identify any contested costs and the basis of their objection in writing. All undisputed costs shall be remitted by the Companies in accordance with the schedule set forth above. Disputed costs shall be paid, if required, ten (10) days after resolution of the dispute. The Companies shall have the burden of proving by a preponderance of the evidence any EPA accounting error, or the inclusion of any cost outside the scope of this Consent Order or inconsistent with the NCP. Interest shall accrue during any cost dispute.

## **2. RESERVATIONS OF RIGHTS**

22.1. The payment of stipulated penalties and costs as may be required by this Consent Order shall not preclude EPA from pursuing any other remedies or sanctions which may be available by reason of failure on the part of either or both Companies to comply with any portion of this Consent Order.

22.2. Except as expressly provided in this Consent Order, each Party reserves all rights and defenses it may have. Nothing in this Consent Order will affect EPA's removal authority or EPA's response or enforcement authorities, including but not limited to the right to seek injunctive relief, stipulated penalties, statutory penalties, and/or punitive damages, nor preclude the United States from taking action to enforce this Consent Order, nor from taking any action pursuant to CERCLA or any other applicable authority.

## **3. OTHER CLAIMS**

23.1. By entering into this Consent Order, the Companies waive the right to seek reimbursement under Section 106(b) of CERCLA, 42 U.S.C. \_ 9606(b), or to present a claim under Sections 111 or 112 of CERCLA, 42 U.S.C. \_\_ 9611 or 9612, for the costs of implementing this Consent Order. This Consent Order does not constitute any decision on preauthorization of funds under Section 111(a)(2) of CERCLA, 42 U.S.C. \_ 9611(a)(2). However, the Companies expressly reserve any and all claims they may have against any Department, Agency or organizational unit of the United States or other entity or person other than EPA. Such claims may include, but are not limited to, contribution and counterclaims relating to or arising out of matters covered by or referenced in this Consent Order.

## **4. INDEMNIFICATION**

24.1. The United States including its agencies, officers, employees, and agents, shall not be liable for any injuries or damages to persons or property resulting from acts or omissions by the Companies, their officers, employees, receivers, trustees, agents, or contractors in carrying out any

activities pursuant to this Consent Order; nor shall the United States be deemed a party to any contract made by either Company, or their agents in carrying out any activities pursuant to this Consent Order. Each Company shall save and hold harmless the United States, its agencies, officers, employees, and agents from, and shall indemnify the United States against and for, any and all claims or causes of action arising from or on account of such Company's acts or omissions its agents or representatives, relating in any way to any activities pursuant to this Consent Order except to the extent such claims or causes of action relate to negligence, gross negligence or willful misconduct on the part of EPA or its contractors.

#### **5. JUDICIAL REVIEW**

25.1. The Companies shall not seek judicial review of this Consent Order in any action except an action by the United States to: 1) enforce this Consent Order; 2) recover costs incurred in connection with this Consent Order; or 3) compel action relating to the slag addressed by this Consent Order. Judicial review of this Consent Order shall be limited to the administrative record. Otherwise applicable principles of administrative law shall govern whether any supplemental materials may be considered by the court. In considering objections raised in any judicial review, EPA's decisions shall be upheld unless the court finds they were arbitrary and capricious or otherwise not in accordance with law. Nothing in this paragraph shall limit any action by the Companies against any party, including any departments, agencies or subdivisions of the United States other than EPA, to recover costs incurred in implementing this Consent Order, or for damages or contribution pursuant to Section 107 of CERCLA, 42 U.S.C. \_ 9607, or other applicable law; or any action pursuant to Section 310 of CERCLA, 42 U.S.C. \_ 9659, or Section 7002 of RCRA, 42 U.S.C. \_ 6972.

#### **6. COMMUNITY RELATIONS**

26.1. Community relations activities relevant to the implementation of this Order are the primary responsibility of EPA and its representatives. The Companies shall provide appropriate assistance upon EPA request. Whenever possible, the Parties agree to cooperate in the conduct of community relations activities.

26.2. The parties recognize the considerable public interest in matters covered by this Consent Order, and the value of broad community involvement in the process, particularly with respect to intrusive or potentially disruptive activities such as home testing. The Parties agree to cooperate in keeping the affected communities informed of the progress in the implementation of this Consent Order, and to facilitate community participation in planning and decision-making to the maximum extent practicable, including, but not limited to, implementation of EPA-approved Work Plans, Graded Decision Guidelines, and other EPA-approved technical interim work products.

#### **7. EFFECTIVE DATE AND SUBSEQUENT MODIFICATION**

27.1. The effective date of this Consent Order shall be the date it is issued by EPA.

27.2. This Consent Order may be amended by mutual agreement of EPA and the Companies. Amendments shall be in writing and shall be effective when executed by EPA.

#### **8. COMPLETION**

28.1. The requirements of this Consent Order shall be completed when the Companies demonstrate in writing and certify to EPA satisfaction that all requirements of this Consent Order have been satisfied, and EPA has approved

the certification in writing. The Companies may request EPA approval of their certification of completion at any time following the submission of certified documentation. Each Company may request separate certification of completion with respect to the exposure studies and GDG implementation for which it is responsible under this Consent Order.

**9. SIGNATORIES**

29.1. The undersigned representatives certify that they are fully authorized to enter into this Consent Order and to execute and legally bind their respective principal hereto.

**For the Monsanto Company:**

By: \_\_\_\_\_ Date: \_\_\_\_\_

Title: \_\_\_\_\_

**For FMC Corporation:**

By: \_\_\_\_\_ Date: \_\_\_\_\_

Title: \_\_\_\_\_

**IT IS SO ORDERED:**

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, REGION 10**

By: \_\_\_\_\_ Date: \_\_\_\_\_

Title: \_\_\_\_\_